CIGARETTE INFORMATION REPORT
RESEARCH AND DEVELOPMENT

PHILIP MORRIS
U.S.A.

2055656134

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PHILIP MORRIS U.S.A.

RESEARCH CENTER

RICHMOND, VIRGINIA

C.I. REPORT

July 31, 1991

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ALPHABETICAL INDEX OF BRANDS

BRAND	SIZE	PAGE NO.*	COMPANY**
Alpine	K-FM	54	PM
Alpine Lights	K-FM	53	PM
Alpine Lights	100M	60	PM
Alpine	100M	61	PM
American Filters	K-F	52	A
American Filters	100	58	A
American Lights	K-F	50	A
American Lights	100	58	A
Barclay	K-F	8	BW
Barclay	100	24	BW
Belair	K-FM	19	BW
Belair	100M	36	BW
Benson & Hedges (Box)	K-F	64	PM
Benson & Hedges	100	29	PM
Benson & Hedges Men.	100M	38	PM
Benson & Hedges (Box)	100	64	PM
Benson & Hedges Men. (Box)	100M	66	PM
Benson & Hedges Lights	100	26	PM
Benson & Hedges Lights Men.	100M	37	PM
Benson & Hedges Lights (Box)	100	27	PM
Benson & Hedges Lts.Men. (Box)	100M	37	PM
B & H DeLuxe U.L. (Box)	100	24	PM
B & H DeLuxe U.L. Men. (Box)	100M	33	PM
B & H Multifilter	K-FC	44	PM
Bristol Lights	K-F	49	PM
Bristol Lights	K-FM	53	PM
Bristol Lights	100	56	PM
Bristol Lights	100M	60	PM
Cambridge Full Flavor	KF	52	PM
Cambridge Full Flavor	100	59	PM
Cambridge Ultra Low Tar	100	55	PM
Cambridge Lights	K-F	50	PM
Cambridge Lights Men.	K-FM	54	PM
Cambridge Lights	100	56	PM
Cambridge Lights Men.	100M	60	PM
Camel (Box)	L-F	64	R
Camel	R-NF	47	R
Camel	K-F	14	R
Camel Lights (Box)	L-F	46	R
Camel Lights	K-F	13	R
Camel Lights	100	27	R
Capri (Box)	100	41	BW
Capri Men. (Box)	100M	43	BW
Ultra Carlton (Box)	K-F	64	A
Carlton	K-F	8	A
Carlton Men.	K-FM	16	A
Carlton	100	22	A
Carlton (Box)	100	22	A
Carlton Men.	100M	66	A
Carlton Men. (Box)	100M	66	A
Carlton	120	31	A
Carlton Men.	120M	39	A
Century 25's	K-F	64	R
Century Lights 25's	K-F	64	R
Century 25's	100	64	R
Century Lights 25's	100	64	R
Chesterfield	R-NF	66	LG
Chesterfield King	K-NF	47	LG
Commander King Size	K-NF	47	PM
Commander Regular	R-NF	66	PM
Doral Full Flavor	K-F	51	R
Doral Full Flavor Men.	K-FM	54	R
Doral Full Flavor	100	58	R
Doral Full Flavor Menthol	100M	61	R
Doral Lights	K-F	49	R
Doral Lights Men.	K-FM	53	R
Doral Lights	100	57	R
Doral Lights Men.	100M	60	R
Doral Ultra Lights	K-F	48	R
Doral Ultra Lights	100	55	R
English Ovals (Box)	K-NF	66	PM
Eve Slim Lights (Box)	100	64	LG
Eve Slim Lts. Men. (Box)	100M	66	LG
Eve Lights (Box)	120	64	LG
Eve Lights Men. (Box)	120M	66	LG
Hi-Lite (Box)	100	64	PM
H. Tareyton	K-NF	66	A
Kent (Box)	L-F	64	LO
Kent	K-F	13	LO
Kent III	K-F	8	LO
Kent	100	28	LO
Kent Men.	100M	66	LO
Kent III	100	23	LO
Kent III (Box)	100	64	LO
Kent Golden Lts. (Box)	L-F	64	LO
Kent Golden Lts.	K-F	10	LO
Kent Golden Lts. Men.	K-FM	66	LO
Kent Golden Lts.	100	25	LO
Kent Golden Lts. Men.	100M	66	LO
Kent Golden Lts. (Box)	100	64	LO
Kool	R-NFM	66	BW
Kool (Box)	L-FM	66	BW
Kool	K-FM	21	BW
Kool Lights	K-FM	18	BW
Kool Milds	K-FM	20	BW
Kool Milds (Box)	L-FM	20	BW
Kool Ultra	K-FM	17	BW
Kool	100M	38	BW
Kool Lights	100M	34	BW
Kool Milds	100M	66	BW
Kool Ultra	100M	35	BW
Lark	K-FC	64	LG
Lark	100C	64	LG
Lark Lights	K-FC	44	LG
Lark Lights	100C	45	LG
L & M	K-F	13	LG
L & M	100	28	LG
Lucky Strike	R-NF	47	A
Lucky Strike	K-F	14	A
Lucky Strike (Box)	K-F	64	A
Lucky Strike Lights	K-F	64	A
Lucky Strike	100	64	A
Lucky Strike Lights	100	64	A
Magna (Box)	L-F	51	R
Magna	K-F	51	R
Magna Lites (Box)	L-F	48	R
Magna Lites	K-F	50	R
Malibu	K-F	51	A
Malibu	K-FM	66	A
Malibu	100	59	A
Malibu Low Tar Men.	100M	61	A
Malibu Lights	K-F	48	A
Malibu Lights	100	56	A
Malibu Ultra Lights	100	55	A
Marlboro (Box)	L-F	46	PM
Marlboro	K-F	15	PM
Marlboro 25's	K-F	64	PM
Marlboro Lights	K-F	12	PM
Marlboro Lights 25's	K-F	64	PM
Marlboro Lights (Box)	K-F	12	PM
Marlboro Lights	100	26	PM
Marlboro Lights (Box)	100	27	PM
Marlboro Lts. Men. (Box)	K-FM	19	PM
Marlboro Lts. Men. (Box)	100M	36	PM
Marlboro Men.	K-FM	20	PM
Marlboro	100	30	PM
Marlboro (Box)	100	64	PM
Max	120	64	LO
Max Men.	120M	66	LO

*Location of complete analytical data in report.
**Key: A = American; BW = Brown & Williamson; LG = Liggett Group; LO = Lorillard
PM = Philip Morris; R = Reynolds

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ALPHABETICAL INDEX OF BRANDS (cont.)

BRAND	SIZE	PAGE NO.*	COMPANY**
Merit Ultra Lts.	K-F	9	PM
Merit Ultra Lts. (Box)	K-F	9	PM
Merit Ultra Lts. (Box)	100	24	PM
Merit (Box)	K-F	10	PM
Merit	K-F	10	PM
Merit Men.	K-FM	18	PM
Merit Ultra Lts. Men.	K-FM	17	PM
Merit	100	26	PM
Merit Ultra Lts.	100	24	PM
Merit Men.	100M	36	PM
Merit Ultra Lts. Men.	100M	33	PM
More	120	31	R
More Men.	120M	39	R
More Lights (Box)	100	41	R
More Lights Men. (Box)	100M	43	R
Newport (Box)	L-FM	66	LO
Newport (Box)	100M	66	LO
Newport	K-FM	21	LO
Newport (25's)	K-FM	66	LO
Newport	100M	38	LO
Newport (25's)	100M	66	LO
Newport Lights	K-FM	18	LO
Newport Lights (Box)	L-FM	66	LO
Newport Lights	100M	35	LO
Newport Lights (Box)	100M	66	LO
Newport Stripes (Box)	100	28	LO
Newport Stripes Men. (Box)	100M	37	LO
Now (Box)	L-F	64	R
Now	K-F	8	R
Now Men.	K-FM	16	R
Now	100	22	R
Now Men.	100M	32	R
Old Gold Straights	K-NF	66	LO
Old Gold	K-F	15	LO
Old Gold Lights	K-F	64	LO
Old Gold	100	64	LO
Pall Mall	K-F	64	A
Pall Mall Lights	100	64	A
Pall Mall	K-NF	47	A
Pall Mall	100	29	A
Parliament Lights (Box)	L-F	46	PM
Parliament Lights	K-F	11	PM
Parliament Lights	100C	45	PM
P.M. International (Box)	100	64	PM
P.M. International Men. (Box)	100M	66	PM
Players (Box)	R-NF	66	PM
Players (Box)	K-F	64	PM
Players Men. (Box)	K-FM	66	PM
Players (Box)	100	64	PM
Players Men. (Box)	100M	66	PM
Players Lights 25's	K-F	64	PM
Players Lights Men. 25's	K-FM	64	PM
Players Lights 25's	100	64	PM
Players Lights Men. 25's	100M	66	PM
Pyramid	K-NF	52	LG
Pyramid Lights	K-F	49	LG
Pyramid Ultra Lights	100	56	LG
Pyramid Lights	100	57	LG
Pyramid Lights Menthol	100M	61	LG
Raleigh	K-NF	66	BW
Raleigh	K-F	14	BW
Raleigh Lights	K-F	12	BW
Raleigh Lights	100	28	BW
Raleigh	100	29	BW
Richland 25's	K-F	64	BW
Richland 25's	100	64	BW
Richland Men. 25's	K-FM	66	BW
Richland Lights 25's	K-F	64	BW
Richland Lights 25's	100	64	BW
Salem	K-FM	21	R
Salem	100M	38	R
Salem Lights	K-FM	20	R
Salem Lights	100M	34	R
Salem Lights (Box)	100M	37	R
Salem Ultra Lights	K-FM	17	R
Salem Ultra Lights	100M	32	R
Salem Slim Lights (Box)	100M	43	R
Saratoga (Box)	120	31	PM
Saratoga Men. (Box)	120M	39	PM
Satin	100	64	LO
Satin Men.	100M	66	LO
Silva Thins	100	64	A
Silva Thins Men.	100M	66	A
Spring	100M	66	LO
St. Moritz	100	64	LG
St. Moritz Men.	100M	66	LG
Tall	120	64	A
Tall Men.	120M	66	A
Tareyton	K-FC	44	A
Tareyton	100C	45	A
Tareyton Lights	K-FC	64	A
Tareyton Long Lights	100C	45	A
Triumph	K-F	64	LO
Triumph Men.	K-FM	66	LO
Triumph	100	64	LO
Triumph Men.	100M	66	LO
True	K-F	8	LO
True	100	25	LO
True Men.	K-FM	16	LO
True Men.	100M	34	LO
Vantage	K-F	11	R
Vantage Men.	K-FM	19	R
Vantage	100	25	R
Vantage Men.	100M	35	R
Vantage Ultra Lts.	K-F	9	R
Vantage Ultra Lts.	100	23	R
Viceroy	K-F	52	BW
Viceroy Lights	K-F	50	BW
Viceroy Lights	100	57	BW
Viceroy	100	59	BW
Va. Slims	100	41	PM
Va. Slims Men.	100M	43	PM
Va. Slims Lights (Box)	100	40	PM
Va. Slims UL (Box)	100	40	PM
Va. Slims UL Men. (Box)	100M	42	PM
Va. Slims Lights (Box)	120	31	PM
Va. Slims Lts. Men.(Box)	100M	42	PM
Va. Slims Lts. Men.(Box)	120M	39	PM
Va. Slims SuperSlims (Box)	100	40	PM
Va. Slims SuperSlims Menthol (Box)	100M	42	PM
Winston (Box)	L-F	46	R
Winston	K-F	15	R
Winston Lights (Box)	L-F	46	R
Winston Lights	K-F	11	R
Winston Ultra Lights	K-F	9	R
Winston Lights	100	27	R
Winston Lights (Box)	100	26	R
Winston	100	30	R
Winston Ultra Lights	100	23	R

*Location of complete analytical data in report.
**Key: A = American; BW = Brown & Williamson; LG = Liggett Group; LO = Lorillard; PM = Philip Morris; R = Reynolds

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C.I. HIGHLIGHTS
JULY, 1991

NEW BRANDS

PHILIP MORRIS
MARLBORO MEDIUM KING SIZE (BOX AND SOFT PACK)

Philip Morris is nationally distributing **Marlboro Medium King Size (Box and Soft Pack)**. These cork tipped cigarettes deliver 12 mg tar and 0.8 mg nicotine.

PHILIP MORRIS
MARLBORO KING SIZE MENTHOL (BOX)

Philip Morris is test marketing **Marlboro King Size Menthol (Box)** cigarettes. This product delivers 15 mg tar, 1.0 mg nicotine and 0.5 mg smoke menthol. It has replaced Marlboro King Size Menthol (Soft Pack) in Region 1 (Maine, Vermont, Massachusetts, Connecticut, New York, New Jersey and part of Pennsylvania).

PHILIP MORRIS
CAMBRIDGE LOWEST KING SIZE AND 100
BRISTOL LOWEST KING SIZE AND 100

Philip Morris is nationally distributing **Cambridge Lowest King Size and 100** as branded generics. The Cambridge Lowest King Size delivers 1 mg tar and 0.1 mg nicotine. The Cambridge Lowest 100 delivers 2 mg tar and 0.2 mg nicotine. Another product, **Bristol Lowest King Size and 100**, is available only in the Northeastern U.S. and has smoke deliveries identical to Cambridge Lowest KS and 100. Bristol Lowest is available as a subgeneric product. These products will compete against Now and Carlton.

R. J. REYNOLDS
WINSTON ULTRA LIGHTS KING SIZE AND 100 (BOX)

R. J. Reynolds is test marketing **Winston Ultra Lights King Size and 100 (Box)** cigarettes in selected areas of the U.S. Winston Ultra Lights KS and 100 (Box) have white tipping and two rows of laser perforation, while the Winston Ultra Lights KS and 100 (Soft Pack) already on the market have cork tipping and one row of Hauni laser perforation. Winston Ultra Lights KS (Box) has a smaller circumference (24.5 vs. 24.9 mm) and a lower tar delivery (5 vs. 6 mg) than the Winston Ultra Lights King Size (Soft Pack). **Winston Ultra Lights 100 (Box)** has a higher tar delivery (6 vs. 5 mg) than Winston Ultra Lights 100 (Soft Pack), correlating with a less efficient filter (59 vs. 66%), lower ventilation (48 vs. 59%) and a less permeable cigarette paper (24 vs. 38 ml/cm^2 x min.). The puff count for the 100 (Box) is lower than the 100 (Soft Pack) (8.4 vs. 9.8 puffs) correlating with higher paper citrate (1.6 vs. 0.6%) and lower tobacco weight (0.67 vs. 0.72 g). The 100 (Box) also has a smaller circumference (24.2 vs. 24.9 mm) than the 100 (Soft Pack).

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NEW BRANDS (cont.)

R. J. REYNOLDS
CAMEL NINETY99NINES™ 100 (BOX)
CAMEL NINETY99NINES™ LIGHTS 100 (BOX)

R. J. Reynolds is test marketing **Camel Ninety99Nines™ 100 (Box)** (18 mg tar, 1.3 mg nicotine) and **Camel Ninety99Nines™ Lights 100 (Box)** cigarettes (10 mg tar, 0.8 mg nicotine). These are box line extensions of Camel Full Flavor and Camel Lights. These cigarettes were picked up in California, although the geographic extent of this introduction is still undetermined.

R. J. REYNOLDS
DAKOTA KS AND 100 (BOX)
DAKOTA LIGHTS KS AND 100 (BOX)

R. J. Reynolds is test marketing **Dakota King Size and 100 (Box)** and **Dakota Lights King Size and 100 (Box)** in Nashville, Tennessee and Houston, Texas as full margin brands. Dakota King Size (Box) (18 mg tar, 1.4 mg nicotine) and Dakota Lights King Size (Box) (12 mg tar, 1.0 mg nicotine) have been in test market since March, 1990. They were introduced as 79 mm products and are now 83 mm products. Shipments began in March, 1991 for Dakota 100 (Box) (17 mg tar, 1.2 mg nicotine) and Dakota Lights 100 (Box) (12 mg tar, 0.9 mg nicotine). The King Size Slide Box product being test marketed in Arizona is not different analytically from this King Size Box version. These products are positioned against Marlboro smokers.

BROWN & WILLIAMSON
VICEROY 100 (BOX)
VICEROY LIGHTS 100 (BOX)

Brown & Williamson is test marketing **Viceroy 100 (Box)** and **Viceroy Lights 100 (Box)** in California and Hawaii. These brands are being sold at generic prices. Viceroy 100 (Box) delivers 17 mg tar and 1.2 mg nicotine. Viceroy Lights 100 (Box) delivers 12 mg tar and 0.9 mg nicotine. The 100 (Box) products have a shorter cigarette length (97.3 vs. 98.8 mm) than the 100 (Soft Pack) products already on the market. Viceroy 100 (Soft Pack and Box) are similar in all other characteristics. Viceroy Lights 100 (Box) also has a shorter filter length (27.2 vs. 29.9 mm) and lower filter weight (0.16 vs. 0.18 g) than Viceroy Lights 100 (Soft Pack).

BROWN & WILLIAMSON
RALEIGH EXTRA KING SIZE NON-FILTER

Brown & Williamson is nationally distributing **Raleigh Extra King Size Non-Filter** cigarettes (24 mg tar, 1.3 mg nicotine) at subgeneric prices.

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NEW BRANDS (cont.)

LORILLARD
STYLE LIGHTS 100 (BOX) (PLAIN & MENTHOL)
STYLE ULTRA LIGHTS 100 (BOX)

Test marketing began in February, 1991 for **Style** cigarettes at two price tiers: branded generic in New Orleans and full margin in the Hartford area. The full margin product was tested. Style Lights delivers 11 mg tar and 0.9 mg nicotine. Style Lights Menthol delivers 11 mg tar, 0.8 mg nicotine, and 0.5 mg smoke menthol. Style Ultra Lights delivers 4 mg tar and 0.4 mg nicotine. This product has a dual CA filter (16.5 mm inner and 10.5 mm outer with no space between plugs).

LORILLARD
TRUE LONG SIZE (BOX)
TRUE 100 (BOX)

Lorillard is test marketing **True Long Size (Box)** (5 mg tar, 0.4 mg nicotine) and **True 100 (Box)** (6 mg tar, 0.5 mg nicotine) cigarettes. The test market areas designated for these products are predominately strong True and box category markets. These cigarettes were received from Maine and New Hampshire.

LORILLARD
OLD GOLD 100
OLD GOLD LIGHTS 100

Lorillard is test marketing **Old Gold 100** (19 mg tar, 1.4 mg nicotine) and **Old Gold Lights 100** (13 mg tar, 1.0 mg nicotine) as branded generics in Kentucky and Montana. Old Gold is still being sold as a full margin product in all other locations. The packaging of the branded generics is identical to that of the full margin products already on the market.

AMERICAN
BULL DURHAM KS (BOX)
BULL DURHAM LIGHTS KS (BOX)

American is nationally distributing **Bull Durham King Size (Box)** and **Bull Durham Lights King Size (Box)**. These brands are being sold at subgeneric prices and a cigarette lighter is attached to each carton. The brand was originally introduced in June, 1966 and discontinued in May, 1986. These cigarettes were in test market from September, 1990 until March, 1991. Bull Durham KS (Box) delivers 16 mg tar and 1.2 mg nicotine. Bull Durham Lights KS (Box) delivers 10 mg tar and 0.8 mg nicotine.

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BRAND MODIFICATIONS

R. J. REYNOLDS
SALEM LIGHTS 100

R. J. Reynolds decreased the expanded tobacco (15 to 7%) in **Salem Lights 100** cigarettes, resulting in higher tobacco weight (0.75 to 0.84 g), density (0.222 to 0.251 g/cc) and puff count (9.8 to 11.1 puffs). A less permeable cigarette paper (37 to 24 ml/cm^2 x min.) and increased ventilation (40 to 48%) were also noted. The smoke deliveries did not change.

R. J. REYNOLDS
DORAL LIGHTS KING SIZE MENTHOL AND 100 MENTHOL

R. J. Reynolds has increased the tobacco weight (0.61 to 0.67 g) and density (0.215 to 0.238 g/cc) of **Doral Lights King Size Menthol**. Also there has been an increase in tobacco weight (0.74 to 0.80 g) and density (0.220 to 0.240 g/cc) for **Doral Lights 100 Menthol**. Smoke deliveries did not change.

R. J. REYNOLDS
VANTAGE KING SIZE

R. J. Reynolds has lowered the expanded tobacco in **Vantage King Size** from 16 to 12%. A less permeable cigarette paper (41 to 26 ml/cm^2 x min.) was also observed. Smoke deliveries did not change.

R. J. REYNOLDS
VANTAGE ULTRA LIGHTS KING SIZE
VANTAGE ULTRA LIGHTS 100

R. J. Reynolds decreased the expanded tobacco (21 to 16%) in **Vantage Ultra Lights King Size and 100**. There were no changes in smoke deliveries for either brand. A lower level of paper citrate (1.5 to 0.5%) was also observed for Vantage Ultra Lights King Size, resulting in higher puff count (7.2 to 7.9 puffs) and increased static burning time (6.6 to 7.5 min.). The decrease in expanded tobacco resulted in higher tobacco weight (0.71 to 0.76 g) and density (0.212 to 0.226 g/cc) for Vantage Ultra Lights 100. Higher puff count (9.0 to 10.2 puffs) and increased static burning time (6.5 to 7.8 min.) were also observed, correlating with higher tobacco weight and a lower level of paper citrate (1.6 to 0.5%).

AMERICAN TOBACCO CO.
CARLTON 100

American increased the filter length (26.8 to 30.9 mm) and filter weight (0.17 to 0.19 g) of **Carlton 100** cigarettes, resulting in shorter rod length (72.8 to 68.7 mm) and lower tobacco weight (0.65 to 0.62 g). Ventilation type changed from two rows laser to one row of Hauni laser perforation. The smoke deliveries did not change.

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PRICE TIER CHANGES

AMERICAN TOBACCO CO.
LUCKY STRIKE KING SIZE (SOFT PACK & BOX)
LUCKY STRIKE 100 (SOFT PACK)
LUCKY STRIKE LIGHTS KING SIZE & 100 (SOFT PACK)

American Tobacco Company is marketing **Lucky Strike and Lucky Strike Lights** at generic pricing in Arkansas, Louisiana, Mississippi and Tennessee; and at subgeneric pricing in Des Moines, Iowa. Samples of the five brands were received from Louisiana and Des Moines. The test market and nationally available products are similar in analytical characteristics. There was no change in pack graphics; however, the cartons now advertise "Great New Price."

CIGARETTE PAPER CHANGE

R. J. Reynolds has changed the cigarette paper on Camel Non-Filter from flax to 95-100% wood pulp. Only the Now family continues to have flax paper.

FORMAT CHANGE

The sales figures given in the C.I. Report represent data from "The Maxwell Consumer Report" which is issued quarterly. Previously, this report summarized sales for each brand in billions of cigarettes. Beginning with the first quarter report dated May 20, 1991, the Maxwell Report no longer contains sales for individual Reynolds brands - only total sales for the Reynolds' brand families. As a result, the current C.I. Report contains 1990 year-end sales as reported in the Maxwell Report.

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NEW BRANDS

PHILLIP MORRIS
MARLBORO MEDIUM KING SIZE (BOX & SOFT PACK)

Philip Morris is nationally distributing **Marlboro Medium King Size (Box and Soft Pack)**.

	Marlboro Medium King Size	
	Box	Soft Pack
SMOKE		
Butt Length, mm	34.0	34.0
FTC Tar, mg/cigt.	12.0	12.2
Nicotine, mg/cigt.	0.83	0.83
Puffs/cigt.	8.0	8.3
Filtration Eff., %	53	53
Filler Rod TPM, mg/cigt.	35.5	37.6
CO, mg/cigt.	11.5	13.0
CIGARETTE		
Total RTD, mm of H_2O	114	119
Static Burn. Time, min.	8.1	8.8
Length, mm	82.9	83.5
Circumference, mm	25.0	25.0
PAPER		
Component Type	Cit.	Cit.
Component Percent	0.5	0.4
Permeability, ml/cm² x min.	34	33
FILTER		
Type	CA	CA
RTD, mm of H_2O	87	89
Length, mm	26.6	26.7
Weight, g	0.16	0.16
Fiber denier/shape	3.0/Y	3.0/Y
Tipping Paper Length, mm	31.0	31.0
Tipping Paper Color	Cork	Cork
Ventilation, %	16	15
Type/Rows of Holes	L/1	L/1
FILLER		
Total alkaloids, % (DWB)	1.95	1.90
Total red. sugars, % (DWB)	8.1	7.5
Wt. of tob., g (12.5% OV)	0.665	0.680
Rod Density, g/cc	0.239	0.241
Reconstituted Tob., %	18	18
E.S., %	3	3
Expanded Tobacco, %	12	12

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

PHILIP MORRIS
MARLBORO KING SIZE MENTHOL (BOX)

Philip Morris is test marketing **Marlboro King Size Menthol (Box)** cigarettes. This product has replaced Marlboro King Size Menthol (Soft Pack) in Region 1.

	Marlboro King Size Menthol	
	Box	Soft Pack
SMOKE		
Butt Length, mm	28.0	28.0
FTC Tar, mg/cigt.	15.4	15.2
Nicotine, mg/cigt.	1.00	0.99
Puffs/cigt.	7.7	7.8
Filtration Eff., %	43	44
Filler Rod TPM, mg/cigt.	27.8	27.5
CO, mg/cigt.	14.8	15.1
CIGARETTE		
Total RTD, mm of H_2O	128	116
Static Burn. Time, min.	7.4	7.4
Length, mm	83.0	83.9
Circumference, mm	24.9	24.8
PAPER		
Component Type	Cit.	Cit.
Component Percent	2.0	1.6
Permeability, ml/cm² x min.	48	45
FILTER		
Type	CA	CA
RTD, mm of H_2O	64	66
Length, mm	21.0	21.0
Weight, g	0.13	0.12
Fiber denier/shape	2.8/Y	3.7/Y
Tipping Paper Length, mm	25.0	25.0
Tipping Paper Color	Cork	Cork
Ventilation, %	None	None
FILLER		
Total alkaloids, % (DWB)	2.12	2.10
Total red. sugars, % (DWB)	8.5	7.8
Wt. of tob., g (12.5% OV)	0.722	0.724
Rod Density, g/cc	0.236	0.235
Reconstituted Tob., %	26	22
E.S., %	None	None
Expanded Tobacco, %	16	15
MENTHOL, mg/cigt.		
Smoke	0.51	0.62
Filler	2.1	2.2
Filter	1.1	1.1

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

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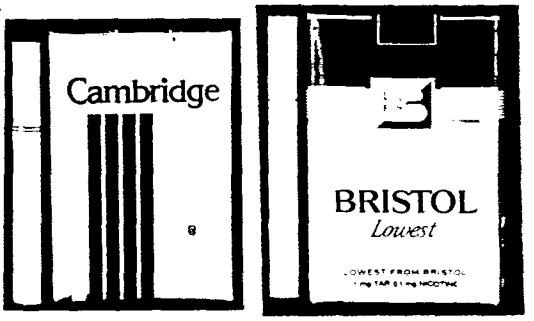
NEW BRANDS



PHILIP MORRIS
CAMBRIDGE LOWEST KING SIZE
BRISTOL LOWEST KING SIZE

Philip Morris is nationally distributing **Cambridge Lowest King Size**. It will compete against Now and Carlton and will be priced in the branded generic category. **Bristol Lowest KS**, a subgeneric product, has smoke deliveries identical to Cambridge Lowest KS.

	Now KS (SP)	Cambridge Lowest KS (SP)	Carlton KS (SP)
SMOKE			
Butt Length, mm	34.0	35.0	33.0
FTC Tar, mg/cigt.	0.9	1.1	1.3
Nicotine, mg/cigt.	0.14	0.11	0.14
Puffs/cigt.	6.6	6.8	7.2
Filtration Eff., %	76	74	73
Filler Rod TPM, mg/cigt.	23.9	25.5	23.0
CO, mg/cigt.	1.6	1.1	2.5
CIGARETTE			
Total RTD, mm of H_2O	114	94	110
Length, mm	83.8	84.1	82.7
Circumference, mm	24.9	24.9	25.0
PAPER			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.6	1.6	0.7
Permeability, ml/cm² x min.	36	48	47
FILTER			
Type	CA	CA	CA
RTD, mm of H_2O	167	143	151
Length, mm	26.9	27.0	24.9
Weight, g	0.19	0.16	0.18
Fiber denier/shape	2.1/Y	1.7/Y	2.0/Y
Tipping Paper Length, mm	31.0	32.0	30.0
Tipping Paper Color	White	White	White
Ventilation, %	75	75	75
Type/Rows of Holes	HL/1	L/2	L/2
FILLER			
Total alkaloids, % (DWB)	2.34	2.37	2.35
Total red. sugars, % (DWB)	5.8	5.4	5.3
Wt. of tob., g (12.5% OV)	0.472	0.512	0.524
Rod Density, g/cc	0.168	0.183	0.182
Reconstituted Tob., %	15	12	20
E.S., %	None	None	None
Expanded Tobacco, %	51	47	46

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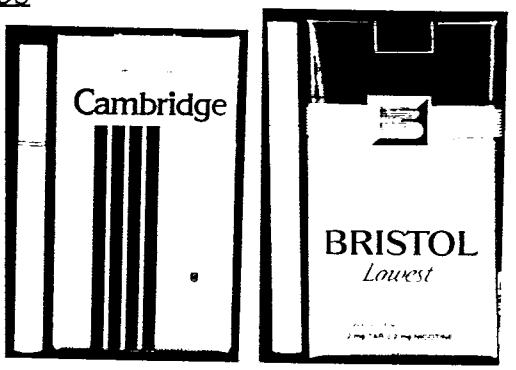
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

PHILIP MORRIS
CAMBRIDGE LOWEST 100
BRISTOL LOWEST 100

Philip Morris is nationally distributing **Cambridge Lowest 100**. It will compete against Now and Carlton and will be priced in the branded generic category. **Bristol Lowest 100**, a subgeneric product, has smoke deliveries identical to Cambridge Lowest 100.



	Now 100 (SP)	Cambridge Lowest 100 (SP)	Carlton 100 (SP)
SMOKE			
Butt Length, mm	38.0	39.0	38.0
FTC Tar, mg/cigt.	2.4	2.0	2.4
Nicotine, mg/cigt.	0.24	0.17	0.24
Puffs/cigt.	7.8	7.8	8.6
Filtration Eff., %	70	74	65
Filler Rod TPM, mg/cigt.	24.6	24.2	23.7
CO, mg/cigt.	3.1	2.6	2.8
CIGARETTE			
Total RTD, mm of H_2O	96	106	92
Length, mm	98.8	99.7	99.6
Circumference, mm	24.9	24.9	24.5
PAPER			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.6	1.4	1.6
Permeability, ml/cm² x min.	24	48	24
FILTER			
Type	CA	CA	CA
RTD, mm of H_2O	132	161	124
Length, mm	30.8	31.6	30.9
Weight, g	0.21	0.19	0.19
Fiber denier/shape	2.5/Y	1.7/Y	2.5/Y
Tipping Paper Length, mm	35.0	36.0	35.0
Tipping Paper Color	White	White	White
Ventilation, %	69	67	74
Type/Rows of Holes	HL/1	L/2	L/2
FILLER			
Total alkaloids, % (DWB)	2.38	2.36	2.33
Total red. sugars, % (DWB)	6.3	4.9	6.6
Wt. of tob., g (12.5% OV)	0.575	0.612	0.619
Rod Density, g/cc	0.171	0.183	0.189
Reconstituted Tob., %	15	12	20
E.S., %	None	None	None
Expanded Tobacco, %	51	47	46

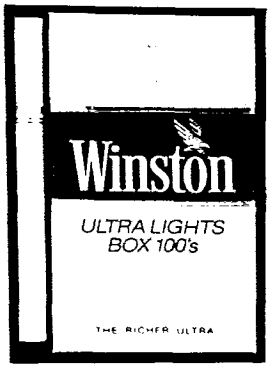
2055656/47

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

R. J. REYNOLDS
WINSTON ULTRA LIGHTS KS AND 100 (BOX)

R. J. Reynolds is test marketing **Winston Ultra Lights King Size and 100 (Box)** cigarettes in selected areas of the U.S.



	Winston Ultra Lights King Size (Box)	Winston Ultra Lights King Size (SP)	Winston Ultra Lights 100 (Box)	Winston Ultra Lights 100 (SP)
SMOKE				
Butt Length, mm	34.0	34.0	38.0	38.0
FTC Tar, mg/cigt.	5.1	6.4	5.5	4.5
Nicotine, mg/cigt.	0.50	0.58	0.52	0.43
Puffs/cigt.	8.0	8.2	8.4	9.8
Filtration Eff., %	60	61	59	66
Filler Rod TPM, mg/cigt.	30.6	32.4	27.0	26.0
CO, mg/cigt.	7.7	8.1	7.7	6.3
CIGARETTE				
Total RTD, mm of H_2O	124	114	108	111
Static Burn. Time, min.	7.9	7.7	6.6	6.8
Length, mm	82.6	83.6	98.0	98.7
Circumference, mm	24.5	24.9	24.2	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	1.6	0.6
Permeability, ml/cm² x min.	23	25	24	38
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	133	124	122	150
Length, mm	26.9	26.9	30.8	30.8
Weight, g	0.17	0.19	0.18	0.22
Fiber denier/shape	2.4/Y	2.4/Y	2.9/Y	2.9/Y
Tipping Paper Length, mm	31.0	31.0	35.0	35.0
Tipping Paper Color	White	Cork	White	Cork
Ventilation, %	46	47	48	59
Type/Rows of Holes	L/2	HL/1	L/2	HL/1
FILLER				
Total alkaloids, % (DWB)	2.22	2.24	2.19	2.18
Total red. sugars, % (DWB)	7.0	6.6	5.8	7.0
Wt. of tob., g (12.5% OV)	0.623	0.631	0.668	0.716
Rod Density, g/cc	0.234	0.226	0.213	0.214
Reconstituted Tob., %	25	25	25	25
E.S., %	None	None	None	None
Expanded Tobacco, %	16	16	16	16

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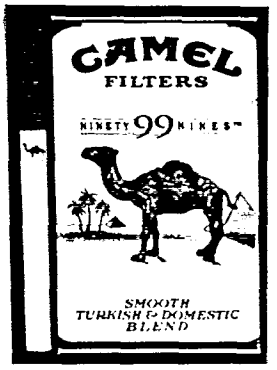
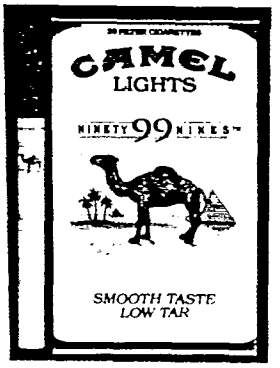
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

R. J. REYNOLDS
CAMEL NINETY99NINES™ 100 (BOX)
CAMEL NINETY99NINES™ LIGHTS 100 (BOX)

R. J. Reynolds is test marketing **Camel Ninety99Nines™ 100 (Box)** and **Camel Ninety99Nines™ Lights 100 (Box)** cigarettes. These are box line extensions of Camel Full Flavor and Camel Lights.





	Camel Ninety99-Nines™ 100 (Box)	Marlboro 100	Camel Ninety99-Nines™ Lights 100 (Box)	Marlboro Lights 100 (Box)
SMOKE				
Butt Length, mm	34.0	34.5	38.0	39.0
FTC Tar, mg/cigt.	17.6	16.5	9.7	10.9
Nicotine, mg/cigt.	1.27	1.16	0.79	0.83
Puffs/cigt.	10.4	10.6	11.0	10.2
Filtration Eff., %	49	50	60	59
Filler Rod TPM, mg/cigt.	33.4	30.1	33.6	30.5
CO, mg/cigt.	17.2	15.3	11.1	11.6
CIGARETTE				
Total RTD, mm of H_2O	114	114	147	120
Static Burn. Time, min.	8.3	8.0	8.3	7.8
Length, mm	98.2	99.6	98.5	98.6
Circumference, mm	24.7	24.9	24.6	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	0.5	0.5
Permeability, ml/cm² x min.	25	46	40	30
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	79	74	131	106
Length, mm	27.0	27.4	31.0	31.3
Weight, g	0.16	0.16	0.20	0.19
Fiber denier/shape	3.0/Y	3.7/Y	3.0/Y	3.0/Y
Tipping Paper Length, mm	31.0	31.5	35.0	36.0
Tipping Paper Color	Cork	Cork	Cork	White
Ventilation, %	11	14	30	30
Type/Rows of Holes	L/1	L/1	L/2	L/2
FILLER				
Total alkaloids, % (DWB)	1.90	1.96	1.85	1.89
Total red. sugars, % (DWB)	9.0	8.2	7.0	7.6
Wt. of tob., g (12.5% OV)	0.819	0.852	0.808	0.793
Rod Density, g/cc	0.238	0.239	0.249	0.239
Reconstituted Tob., %	25	22	25	22
E.S., %	None	3	None	3
Expanded Tobacco, %	7	12	7	12

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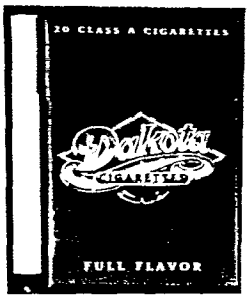
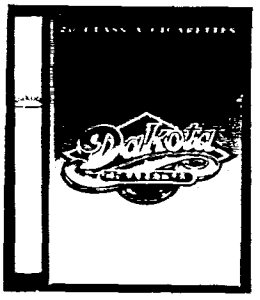
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

R. J. REYNOLDS
DAKOTA KS (BOX)
DAKOTA LIGHTS KS (BOX)

R. J. Reynolds is test marketing **Dakota King Size (Box)** and **Dakota Lights King Size (Box)** in Nashville, TN and Houston, TX as full margin brands.





	Dakota KS (Box)	Marlboro LS (Box)	Dakota Lights KS (Box)	Marlboro Lights KS (Box)
SMOKE				
Butt Length, mm	28.0	26.0	34.0	34.0
FTC Tar, mg/cigt.	18.4	16.3	12.2	11.0
Nicotine, mg/cigt.	1.35	1.10	0.99	0.78
Puffs/cigt.	8.8	8.6	8.7	8.1
Filtration Eff., %	42	44	54	55
Filler Rod TPM, mg/cigt.	32.1	32.8	33.4	31.1
CO, mg/cigt.	13.7	13.2	11.6	11.2
CIGARETTE				
Total RTD, mm of H_2O	111	109	121	121
Static Burn. Time, min.	8.0	8.2	8.5	8.5
Length, mm	83.4	78.9	82.8	82.7
Circumference, mm	24.6	24.9	24.6	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	0.5	0.4
Permeability, ml/cm² x min.	27	30	27	29
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	66	70	100	97
Length, mm	21.1	19.0	27.0	26.9
Weight, g	0.13	0.12	0.17	0.17
Fiber denier/shape	3.2/Y	3.1/Y	3.2/Y	3.0/Y
Tipping Paper Length, mm	25.0	23.0	31.0	31.0
Tipping Paper Color	Cork	Cork	White	White
Ventilation, %	7	12	26	22
Type/Rows of Holes	L/1	L/1	L/2	L/2
FILLER				
Total alkaloids, % (DWB)	2.18	1.93	2.21	1.92
Total red. sugars, % (DWB)	6.9	8.1	5.9	7.8
Wt. of tob., g (12.5% OV)	0.721	0.710	0.664	0.661
Rod Density, g/cc	0.239	0.240	0.247	0.240
Reconstituted Tob., %	20	22	20	22
E.S., %	None	3	None	3
Expanded Tobacco, %	8	12	8	12

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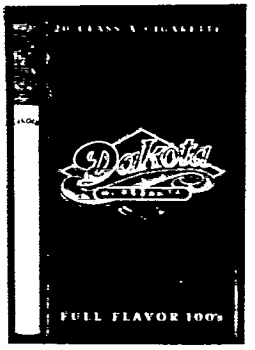
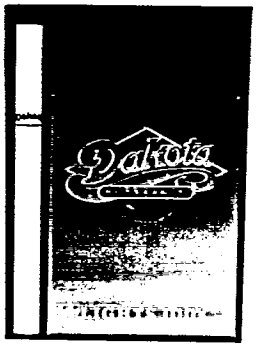
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

R. J. REYNOLDS
DAKOTA 100 (BOX)
DAKOTA LIGHTS 100 (BOX)

R. J. Reynolds is test marketing **Dakota 100 (Box)** and **Dakota Lights 100 (Box)** in Nashville, TN and Houston, TX as full margin brands.





	Dakota 100 (Box)	Marlboro 100 (SP)	Dakota Lights 100 (Box)	Marlboro Lights 100 (Box)
SMOKE				
Butt Length, mm	38.0	34.5	38.0	39.0
FTC Tar, mg/cigt.	16.9	16.5	12.3	10.9
Nicotine, mg/cigt.	1.22	1.16	0.94	0.83
Puffs/cigt.	9.9	10.6	10.4	10.2
Filtration Eff., %	48	50	56	59
Filler Rod TPM, mg/cigt.	32.0	30.1	30.3	30.5
CO, mg/cigt.	14.0	15.3	10.7	11.6
CIGARETTE				
Total RTD, mm of H_2O	111	114	128	120
Static Burn. Time, min.	7.9	8.0	8.0	7.8
Length, mm	98.1	99.6	98.3	98.6
Circumference, mm	24.2	24.9	24.3	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	0.5	0.5
Permeability, ml/cm² x min.	27	46	27	30
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	76	74	103	106
Length, mm	31.0	27.4	31.1	31.3
Weight, g	0.18	0.16	0.19	0.19
Fiber denier/shape	5.4/Y	3.7/Y	3.2/Y	3.0/Y
Tipping Paper Length, mm	35.0	31.5	35.0	36.0
Tipping Paper Color	Cork	Cork	White	White
Ventilation, %	16	14	30	30
Type/Rows of Holes	L/2	L/1	L/2	L/2
FILLER				
Total alkaloids, % (DWB)	1.99	1.96	1.95	1.89
Total red. sugars, % (DWB)	5.4	8.2	6.7	7.6
Wt. of tob., g (12.5% OV)	0.774	0.852	0.780	0.793
Rod Density, g/cc	0.247	0.239	0.247	0.239
Reconstituted Tob., %	27	22	27	22
E.S., %	None	3	None	3
Expanded Tobacco, %	6	12	6	12

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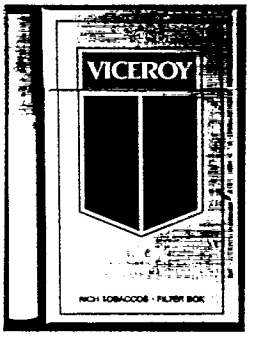
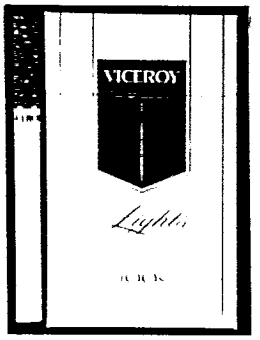
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

BROWN & WILLIAMSON
VICEROY 100 (BOX)
VICEROY LIGHTS 100 (BOX)

Brown & Williamson is test marketing **Viceroy 100 (Box)** and **Viceroy Lights 100 (Box)** in California and Hawaii. These brands are being sold at generic prices.





	Viceroy 100 (Box)	Viceroy 100 (Soft Pack)	Viceroy Lights 100 (Box)	Viceroy Lights 100 (Soft Pack)
SMOKE				
Butt Length, mm	35.0	35.0	39.0	39.0
FTC Tar, mg/cigt.	16.9	17.4	12.5	12.3
Nicotine, mg/cigt.	1.18	1.20	0.86	0.93
Puffs/cigt.	10.1	10.2	9.0	9.6
Filtration Eff., %	52	52	57	57
Filler Rod TPM, mg/cigt.	34.4	33.2	33.3	30.6
CO, mg/cigt.	14.8	15.4	13.4	13.2
CIGARETTE				
Total RTD, mm of H_2O	120	122	135	131
Static Burn. Time, min.	8.0	7.9	7.3	7.5
Length, mm	97.3	98.8	97.3	98.7
Circumference, mm	24.9	24.9	25.0	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	1.1	1.0
Permeability, ml/cm^2 x min.	24	24	51	45
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	76	80	99	100
Length, mm	27.2	26.8	27.2	29.9
Weight, g	0.15	0.16	0.16	0.18
Fiber denier/shape	2.9/Y	3.0/Y	2.8/Y	2.9/Y
Tipping Paper Length, mm	32.0	32.0	36.0	36.0
Tipping Paper Color	Cork	Cork	Cork	Cork
Ventilation, %	12	14	15	20
Type/Rows of Holes	L/2	L/2	L/2	L/2
FILLER				
Total alkaloids, % (DWB)	1.91	1.89	1.84	1.97
Total red. sugars, % (DWB)	6.8	6.6	7.0	6.9
Wt. of tob., g (12.5% OV)	0.817	0.833	0.857	0.850
Rod Density, g/cc	0.236	0.235	0.245	0.250
Reconstituted Tob., %	12	12	16	16
E.S., %	7	7	5	5
Expanded Tobacco, %	11	11	None	None

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

BROWN & WILLIAMSON
RALEIGH EXTRA KING SIZE NON-FILTER

Brown & Williamson is nationally distributing **Raleigh Extra King Size Non-Filter** cigarettes at subgeneric prices.

	Raleigh Extra KS Non-Filter	Commander KS Non-Filter
SMOKE		
Butt Length, mm	23.0	23.0
FTC Tar, mg/cigt.	23.9	24.8
Nicotine, mg/cigt.	1.31	1.49
Puffs/cigt.	9.0	9.1
Filler Rod TPM, mg/cigt.	35.0	29.8
CO, mg/cigt.	14.6	13.4
CIGARETTE		
Total RTD, mm of H_2O	67	61
Static Burn. Time, min.	7.4	7.6
Length, mm	84.0	83.9
Circumference, mm	24.9	24.9
PAPER		
Component Type	Cit.	Cit.
Component Percent	1.0	2.4
Permeability, ml/cm^2 x min.	42	45
FILLER		
Total alkaloids, % (DWB)	1.78	1.95
Total red. sugars, % (DWB)	6.8	9.0
Wt. of tob., g (12.5% OV)	1.011	0.974
Rod Density, g/cc	0.245	0.235
Reconstituted Tob., %	18	18
E.S., %	3	3
Expanded Tobacco, %	None	13

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

LORILLARD
STYLE LIGHTS 100 (BOX) PLAIN & MENTHOL

Test marketing began in February, 1991 for **Style Lights 100 (Box)** at two price tiers: branded generic in New Orleans and full margin in the Hartford area. The full margin product was tested.

	Style Lights 100 (Box)	Marlboro Lights 100 (Box)	Style Lights Menthol 100 (Box)	Marlboro Lights Menthol 100 (Box)
SMOKE				
Butt Length, mm	37.0	39.0	37.0	39.0
FTC Tar, mg/cigt.	10.9	10.9	11.0	9.4
Nicotine, mg/cigt.	0.88	0.83	0.82	0.75
Puffs/cigt.	9.1	10.2	9.3	9.3
Filtration Eff., %	55	59	56	54
Filler Rod TPM, mg/cigt.	29.5	30.5	31.3	25.0
CO, mg/cigt.	12.8	11.6	13.0	10.5
CIGARETTE				
Total RTD, mm of H_2O	150	120	153	118
Static Burn. Time, min.	7.2	7.8	7.5	7.7
Length, mm	99.1	98.6	99.1	98.8
Circumference, mm	24.8	24.9	24.6	24.9
PAPER				
Component Type/Percent	Cit./1.9	Cit./0.5	Cit./2.2	Cit./0.7
Permeability, ml/cm² x min.	28	30	27	47
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	109	106	108	102
Length, mm	27.0	31.3	26.8	31.4
Weight, g	0.17	0.19	0.17	0.20
Fiber denier/shape	2.7/Y	3.0/Y	2.7/Y	3.9/Y
Tipping Paper Length, mm	34.0	36.0	34.0	36.0
Tipping Paper Color	White	White	White	White
Ventilation, %	23	30	23	31
Type/Rows of Holes	MM/4	L/2	MM/4	L/2
FILLER				
Total alkaloids, % (DWB)	2.12	1.89	2.04	2.05
Total red. sugars, % (DWB)	5.7	7.6	8.5	8.4
Wt. of tob., g (12.5% OV)	0.841	0.793	0.829	0.778
Rod Density, g/cc	0.239	0.239	0.237	0.233
Reconstituted Tob., %	22	22	22	22
E.S., %	None	3	None	None
Expanded Tobacco, %	12	12	12	15
MENTHOL, mg/cigt.				
Smoke	-	-	0.53	0.54
Filler	-	-	3.5	3.0
Filter	-	-	1.2	2.0

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

LORILLARD
STYLE ULTRA LIGHTS 100 (BOX)

Test marketing began in February, 1991 for **Style Ultra Lights 100 (Box)** at two price tiers: branded generic in New Orleans and full margin in the Hartford area. The full margin product was tested.

	Style Ultra Lights 100 (Box)	Cambridge Ultra Lights 100 (Box)
SMOKE		
Butt Length, mm	37.0	39.0
FTC Tar, mg/cigt.	3.8	4.2
Nicotine, mg/cigt.	0.36	0.37
Puffs/cigt.	8.9	10.8
Filtration Eff., %	69	68
Filler Rod TPM, mg/cigt.	31.6	28.5
CO, mg/cigt.	3.2	5.9
CIGARETTE		
Total RTD, mm of H_2O	102	106
Static Burn. Time, min.	6.2	7.6
Length, mm	99.3	99.6
Circumference, mm	24.7	25.0
PAPER		
Component Type	Cit.	Cit.
Component Percent	2.2	0.5
Permeability, ml/cm² x min.	35	34
FILTER		
Type	CA	CA
RTD, mm of H_2O	136	143
Length, mm	27.0	31.5
Weight, g	0.16	0.20
Fiber denier/shape	1.6/Y	2.9/Y
Tipping Paper Length, mm	34.0	36.0
Tipping Paper Color	White	White
Ventilation, %	66	60
Type/Rows of Holes	MP/6	L/2
FILLER		
Total alkaloids, % (DWB)	2.50	1.90
Total red. sugars, % (DWB)	7.7	7.8
Wt. of tob., g (12.5% OV)	0.707	0.782
Rod Density, g/cc	0.202	0.231
Reconstituted Tob., %	13	22
E.S., %	None	3
Expanded Tobacco, %	25	15

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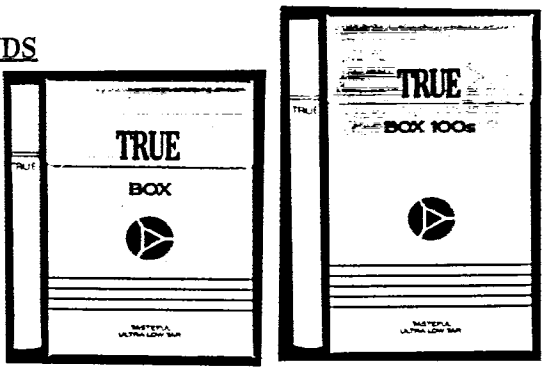
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS



LORILLARD
TRUE LONG SIZE (BOX)
TRUE 100 (BOX)

Lorillard is test marketing **True Long Size (Box)** and **True 100 (Box)** cigarettes. The test market areas designated for these products are predominately strong True and box category markets.

	True Long Size (Box)	Merit Ultra Lights KS (Box)	True 100 (Box)	Merit Ultra Lights 100 (Box)
SMOKE				
Butt Length, mm	33.0	35.0	37.0	39.0
FTC Tar, mg/cigt.	4.5	5.0	6.4	5.8
Nicotine, mg/cigt.	0.37	0.44	0.50	0.48
Puffs/cigt.	7.7	7.9	9.3	8.9
Filtration Eff., %	62	63	56	63
Filler Rod TPM, mg/cigt.	26.8	27.7	29.3	27.3
CO, mg/cigt.	5.1	5.4	6.5	6.8
CIGARETTE				
Total RTD, mm of H_2O	77	108	72	111
Static Burn. Time, min.	7.2	7.9	6.8	6.4
Length, mm	80.2	82.8	98.6	98.3
Circumference, mm	24.8	24.9	24.9	24.1
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.8	0.5	2.0	2.0
Permeability, ml/cm² x min.	40	32	28	44
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	111	127	82	128
Length, mm	24.9	26.7	26.7	31.5
Weight, g	0.18	0.18	0.17	0.18
Fiber denier/shape	1.5/Y	3.2/Y	1.5/Y	3.2/Y
Tipping Paper Length, mm	30.0	32.0	34.0	36.0
Tipping Paper Color	White	Cork	White	Cork
Ventilation, %	59	53	57	52
Type/Rows of Holes	HL/1	L/2	HL/1	L/2
FILLER				
Total alkaloids, % (DWB)	2.21	2.04	2.29	2.05
Total red. sugars, % (DWB)	5.0	5.8	6.3	6.3
Wt. of tob., g (12.5% OV)	0.623	0.594	0.810	0.680
Rod Density, g/cc	0.231	0.215	0.229	0.221
Reconstituted Tob., %	18	22	18	22
E.S., %	None	None	None	None
Expanded Tobacco, %	14	21	14	21

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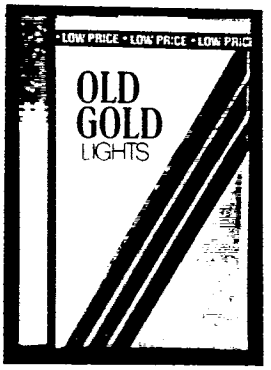
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

LORILLARD
OLD GOLD 100
OLD GOLD LIGHTS 100

Lorillard is test marketing **Old Gold 100** and **Old Gold Lights 100** as branded generics in Kentucky and Montana. The packaging of the branded generics is identical to that of the full margin products already on the market.



	Old Gold 100	Cambridge 100	Old Gold Lights 100	Cambridge Lights 100
SMOKE				
Butt Length, mm	37.0	39.0	37.0	39.0
FTC Tar, mg/cigt.	18.5	16.5	12.6	11.9
Nicotine, mg/cigt.	1.42	1.08	0.99	0.85
Puffs/cigt.	8.9	8.4	9.2	10.1
Filtration Eff., %	44	48	54	58
Filler Rod TPM, mg/cigt.	32.2	28.0	32.5	31.4
CO, mg/cigt.	16.9	16.3	13.5	12.9
CIGARETTE				
Total RTD, mm of H_2O	126	107	141	126
Static Burn. Time, min.	7.1	7.1	7.3	8.1
Length, mm	99.2	99.6	99.5	99.4
Circumference, mm	25.1	24.9	25.1	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.7	1.6	1.8	0.5
Permeability, ml/cm² x min.	18	45	28	24
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	61	62	99	108
Length, mm	26.9	31.4	26.8	31.3
Weight, g	0.16	0.18	0.16	0.19
Fiber denier/shape	5.1/Y	4.4/Y	2.7/Y	2.8/Y
Tipping Paper Length, mm	34.0	36.0	34.0	36.0
Tipping Paper Color	Cork	Cork	Cork	Cork
Ventilation, %	None	None	20	27
Type/Rows of Holes	-	-	ESP/Band	L/2
FILLER				
Total alkaloids, % (DWB)	2.28	1.88	2.27	1.88
Total red. sugars, % (DWB)	8.6	7.7	6.8	7.7
Wt. of tob., g (12.5% OV)	0.831	0.790	0.856	0.786
Rod Density, g/cc	0.230	0.235	0.236	0.234
Reconstituted Tob., %	18	22	27	22
E.S., %	None	3	None	3
Expanded Tobacco, %	12	15	13	15

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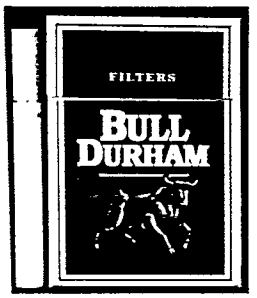
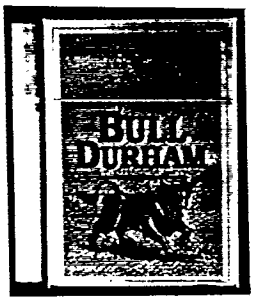
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEW BRANDS

AMERICAN
BULL DURHAM KS (BOX)
BULL DURHAM LIGHTS KS (BOX)

American is nationally distributing **Bull Durham KS (Box)** and **Bull Durham Lights KS (Box)**. These brands are being sold at subgeneric prices and a cigarette lighter is attached to each carton.





	Bull Durham KS (Box)	Bucks KS	Bull Durham Lights KS (Box)	Bucks Lights KS
SMOKE				
Butt Length, mm	33.0	28.0	33.0	34.0
FTC Tar, mg/cigt.	15.7	14.1	10.4	10.3
Nicotine, mg/cigt.	1.20	0.96	0.85	0.73
Puffs/cigt.	8.6	8.0	7.5	7.6
Filtration Eff., %	49	43	54	56
Filler Rod TPM, mg/cigt.	31.8	29.8	26.4	28.0
CO, mg/cigt.	14.4	13.0	9.7	11.3
CIGARETTE				
Total RTD, mm of H_2O	127	100	112	120
Static Burn. Time, min.	8.8	7.1	7.2	7.7
Length, mm	82.7	84.0	82.1	84.6
Circumference, mm	24.9	24.9	24.9	24.9
PAPER				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.6	0.6	0.9	0.8
Permeability, ml/cm^2 x min.	20	33	38	31
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	71	69	88	103
Length, mm	25.0	21.0	24.9	26.9
Weight, g	0.17	0.13	0.18	0.17
Fiber denier/shape	4.2/Y	3.2/Y	4.2/Y	3.2/Y
Tipping Paper Length, mm	30.0	25.0	30.0	31.0
Tipping Paper Color	Cork	Cork	Cork	Cork
Ventilation, %	6	14	25	16
Type/Rows of Holes	L/1	L/1	L/1	L/1
FILLER				
Total alkaloids, % (DWB)	2.07	2.01	2.03	2.08
Total red. sugars, % (DWB)	8.8	7.8	7.3	8.1
Wt. of tob., g (12.5% OV)	0.715	0.702	0.657	0.638
Rod Density, g/cc	0.251	0.226	0.233	0.225
Reconstituted Tob., %	22	22	22	22
E.S., %	None	7	None	7
Expanded Tobacco, %	14	14	14	14

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BRAND MODIFICATIONS

R. J. REYNOLDS
SALEM LIGHTS 100

R. J. Reynolds decreased the expanded tobacco (15 to 7%) in **Salem Lights 100**, resulting in higher tobacco weight, density and puff count. A less permeable cigarette paper and increased ventilation were also noted. Smoke deliveries did not change.

	Salem Lights 100	
	Previous	Present
SMOKE		
Butt Length, mm	38.0	38.0
FTC Tar, mg/cigt.	9.0	8.8
Nicotine, mg/cigt.	0.73	0.72
Puffs/cigt.	9.8	11.1
Filtration Eff., %	59	59
CO, mg/cigt.	9.8	9.6
CIGARETTE		
Total RTD, mm of H_2O	113	112
Static Burn. Time, min.	7.3	7.7
Length, mm	98.7	98.7
Circumference, mm	25.0	24.9
PAPER		
Components		
Type	Cit.	Cit.
Percent	0.5	0.5
Permeability, ml/cm² x min.	37	24
FILTER		
Type	CA	CA
RTD, mm of H_2O	115	116
Length, mm	30.9	30.8
Weight, g	0.19	0.19
Fiber denier/shape	2.4/Y	2.9/Y
Tipping paper length, mm	35.0	35.0
Ventilation, %	40	48
FILLER		
Total alkaloids, % (DWB)	2.04	1.92
Total red. sugars, % (DWB)	7.4	8.3
Wt. of tob., g (12.5% OV)	0.748	0.844
Rod Density, g/cc	0.222	0.251
Reconstituted Tob., %	25	25
E.S., %	None	None
Expanded Tobacco, %	15	7
MENTHOL, MG/CIGT.		
Smoke	0.44	0.44
Filler	3.3	3.3
Filter	1.2	1.5

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BRAND MODIFICATIONS

R. J. REYNOLDS
DORAL LIGHTS KING SIZE MENTHOL AND 100 MENTHOL

R. J. Reynolds has increased the tobacco weight and density of **Doral Lights King Size Menthol and Doral Lights 100 Menthol** cigarettes. Smoke deliveries have not changed.

	Doral Lights Menthol KS		Doral Lights Menthol 100	
	Previous	Present	Previous	Present
SMOKE				
Butt Length, mm	34.0	34.0	38.0	38.0
FTC Tar, mg/cigt.	10.9	10.6	10.4	10.2
Nicotine, mg/cigt.	0.81	0.84	0.79	0.82
Puffs/cigt.	8.2	8.4	9.6	9.9
Filtration Eff., %	52	51	62	62
Filler Rod TPM, mg/cigt.	28.3	30.5	29.8	30.2
CO, mg/cigt.	10.4	9.8	13.1	12.9
CIGARETTE				
Total RTD, mm of H_2O	92	93	118	120
Static Burn. Time, min.	7.5	8.0	7.3	8.0
Length, mm	84.1	84.1	98.8	98.8
Circumference, mm	25.0	24.9	24.9	24.9
PAPER				
Components				
Type	Cit.	Cit.	Cit.	Cit.
Percent	0.5	0.5	0.5	0.6
Permeability, ml/cm² x min.	25	24	27	26
FILTER				
Type	CA	CA	CA	CA
RTD, mm of H_2O	84	83	114	114
Length, mm	27.0	26.9	30.9	30.9
Weight, g	0.16	0.17	0.19	0.19
Fiber denier/shape	3.1/Y	3.6/Y	2.3/Y	2.6/Y
Tipping paper length, mm	31.0	31.0	35.0	35.0
Ventilation, %	34	35	34	35
FILLER				
Total alkaloids, % (DWB)	1.98	2.04	1.89	1.98
Total red. sugars, % (DWB)	7.6	7.8	8.2	8.2
Wt. of tob., g (12.5% OV)	0.610	0.674	0.738	0.804
Rod Density, g/cc	0.215	0.238	0.220	0.240
Reconstituted Tob., %	25	25	25	25
E.S., %	None	None	None	None
Expanded Tobacco, %	16	16	16	16
MENTHOL, MG/CIGT.				
Smoke	0.52	0.56	0.54	0.55
Filler	2.7	2.9	3.4	3.5
Filter	1.5	1.4	1.4	1.6

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BRAND MODIFICATIONS

R. J. REYNOLDS
VANTAGE KING SIZE

R. J. Reynolds has lowered the expanded tobacco in **Vantage King Size** from 16 to 12%. A less permeable cigarette paper was also observed. Smoke deliveries did not change.

	Vantage King Size	
	Previous	Present
SMOKE		
Butt Length, mm	33.0	33.0
FTC Tar, mg/cigt.	8.9	9.0
Nicotine, mg/cigt.	0.66	0.67
Puffs/cigt.	7.7	7.8
CO, mg/cigt.	10.3	10.6
CIGARETTE		
Total RTD, mm of H_2O	134	132
Static Burn. Time, min.	7.3	7.4
Length, mm	84.0	84.1
Circumference, mm	25.1	25.1
PAPER		
Components		
Type	Cit.	Cit.
Percent	0.9	0.9
Permeability, ml/cm² x min.	41	26
FILTER		
Type	CA	CA
RTD, mm of H_2O	113	113
Length, mm	25.1	25.1
Weight, g	0.29	0.29
Tipping paper length, mm	30.0	30.0
Ventilation, %	28	29
FILLER		
Total alkaloids, % (DWB)	1.99	1.95
Total red. sugars, % (DWB)	6.4	6.8
Wt. of tob., g (12.5% OV)	0.656	0.658
Rod Density, g/cc	0.223	0.223
Reconstituted Tob., %	25	25
E.S., %	None	None
Expanded Tobacco, %	16	12

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BRAND MODIFICATIONS

R. J. REYNOLDS
VANTAGE ULTRA LIGHTS KING SIZE

R. J. Reynolds decreased the expanded tobacco (21 to 16%) in **Vantage Ultra Lights King Size** cigarettes. A lower level of citrate in the cigarette paper was also observed, resulting in higher puff count and increased static burning time. Smoke deliveries did not change.

	Vantage Ultra Lights KS	
	Previous	Present
SMOKE		
Butt Length, mm	34.0	34.0
FTC Tar, mg/cigt.	5.2	5.2
Nicotine, mg/cigt.	0.44	0.45
Puffs/cigt.	7.2	7.9
CO, mg/cigt.	7.2	6.9
CIGARETTE		
Total RTD, mm of H_2O	111	113
Static Burn. Time, min.	6.6	7.5
Length, mm	83.8	83.9
Circumference, mm	25.0	24.9
PAPER		
Components		
Type	Cit.	Cit.
Percent	1.5	0.5
Permeability, ml/cm² x min.	26	28
FILTER		
Type	CA	CA
RTD, mm of H_2O	130	131
Length, mm	26.9	26.9
Weight, g	0.19	0.19
Tipping paper length, mm	31.0	31.0
Ventilation, %	50	51
FILLER		
Total alkaloids, % (DWB)	2.33	2.24
Total red. sugars, % (DWB)	6.2	6.9
Wt. of tob., g (12.5% OV)	0.591	0.602
Rod Density, g/cc	0.209	0.214
Reconstituted Tob., %	25	25
E.S., %	None	None
Expanded Tobacco, %	21	16

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BRAND MODIFICATIONS

R. J. REYNOLDS
VANTAGE ULTRA LIGHTS 100

R. J. Reynolds has decreased the expanded tobacco (21 to 16%) in **Vantage Ultra Lights 100**, resulting in higher tobacco weight and density. Higher puff count and increased static burning time correlated with the increased tobacco weight and a lower level of paper citrate. Smoke deliveries did not change.

Vantage Ultra Lights 100

	Previous	Present
SMOKE		
Butt Length, mm	38.0	38.0
FTC Tar, mg/cigt.	5.2	5.1
Nicotine, mg/cigt.	0.47	0.46
Puffs/cigt.	9.0	10.2
CO, mg/cigt.	7.6	7.4
CIGARETTE		
Total RTD, mm of H_2O	120	124
Static Burn. Time, min.	6.5	7.8
Length, mm	98.7	98.9
Circumference, mm	24.9	24.9
PAPER		
Components		
Type	Cit.	Cit.
Percent	1.6	0.5
Permeability, ml/cm² x min.	26	24
FILTER		
Type	CA	CA
RTD, mm of H_2O	147	152
Length, mm	30.8	30.9
Weight, g	0.23	0.22
Tipping paper length, mm	35.0	35.0
Ventilation, %	54	55
FILLER		
Total alkaloids, % (DWB)	2.22	2.17
Total red. sugars, % (DWB)	6.6	7.2
Wt. of tob., g (12.5% OV)	0.711	0.756
Rod Density, g/cc	0.212	0.226
Reconstituted Tob., %	25	25
E.S., %	None	None
Expanded Tobacco, %	21	16

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BRAND MODIFICATIONS

AMERICAN TOBACCO CO.
CARLTON 100

American increased the filter length and filter weight of **Carlton** 100 cigarettes, resulting in shorter rod length and lower tobacco weight. Ventilation type changed from two rows laser to one row of Hauni laser perforation. The smoke deliveries did not change.

	Carlton 100	
	Previous	Present
SMOKE		
Butt Length, mm	38.0	38.0
FTC Tar, mg/cigt.	2.4	2.4
Nicotine, mg/cigt.	0.23	0.24
Puffs/cigt.	8.5	8.6
Filtration Eff., %	64	65
CO, mg/cigt.	3.2	2.8
CIGARETTE		
Total RTD, mm of H_2O	94	92
Static Burn. Time, min.	5.4	5.7
Length, mm	99.6	99.6
Circumference, mm	24.4	24.5
PAPER		
Components		
Type	Cit.	Cit.
Percent	1.6	1.6
Permeability, ml/cm^2 x min.	24	24
FILTER		
Type	CA	CA
RTD, mm of H_2O	124	124
Length, mm	26.8	30.9
Weight, g	0.17	0.19
Fiber denier/shape	3.4/Y	2.5/Y
Tipping paper length, mm	35.0	35.0
Ventilation, %	75	74
Type/Rows of Holes	L/2	HL/1
FILLER		
Total alkaloids, % (DWB)	2.29	2.33
Total red. sugars, % (DWB)	6.4	6.6
Wt. of tob., g (12.5% OV)	0.654	0.619
Rod Length, mm	72.8	68.7
Rod Density, g/cc	0.190	0.189
Reconstituted Tob., %	20	20
E.S., %	None	None
Expanded Tobacco, %	46	46

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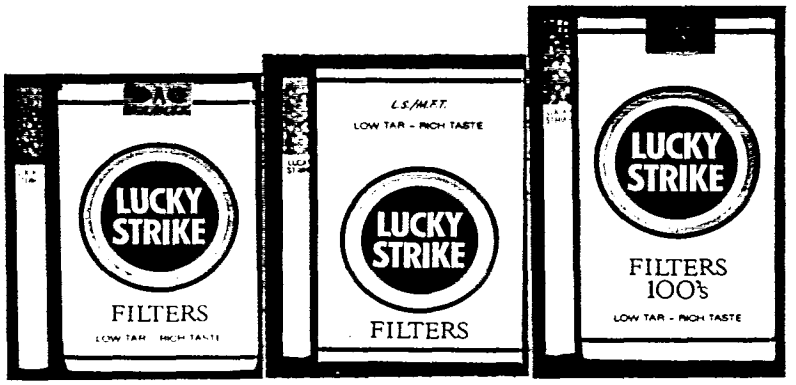
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PRICE TIER CHANGES

AMERICAN TOBACCO CO.
LUCKY STRIKE FILTER

American is marketing **Lucky Strike Filter** packings at generic pricing in Arkansas, Louisiana, Mississippi and Tennessee; and at subgeneric pricing in Des Moines, Iowa. The test market and national products are analytically similar. Pack graphics did not change.



	Lucky Strike		
	King Size (Soft Pack)	King Size (Box)	100 (Soft Pack)
SMOKE			
Butt Length, mm	33.0	33.0	35.0
FTC Tar, mg/cigt.	14.1	13.7	14.4
Nicotine, mg/cigt.	1.08	1.04	1.16
Puffs/cigt.	8.5	8.4	10.4
Filtration Eff., %	48	50	47
Filler Rod TPM, mg/cigt.	30.8	34.2	28.3
CO, mg/cigt.	12.3	12.4	11.9
CIGARETTE			
Total RTD, mm of H_2O	116	119	104
Static Burn. Time, min.	8.6	8.6	7.4
Length, mm	83.0	82.6	99.8
Circumference, mm	25.0	24.9	24.4
PAPER			
Component Type/Percent	Cit./0.7	Cit./0.8	Cit./1.0
Permeability, ml/cm² x min.	25	28	46
FILTER			
Type	CA	CA	CA
RTD, mm of H_2O	71	77	68
Length, mm	25.0	24.9	26.8
Weight, g	0.16	0.16	0.16
Fiber denier/shape	3.8/Y	4.2/Y	4.9/Y
Tipping paper length, mm/Color	30.0/Cork	30.0/Cork	32.0/Cork
Ventilation, %	13	13	24
Type/Rows of Holes	L/1	L/1	L/1
FILLER			
Total alkaloids, % (DWB)	2.02	1.98	2.00
Total red. sugars, % (DWB)	8.8	8.8	8.8
Wt. of tob., g (12.5% OV)	0.703	0.701	0.828
Rod Density, g/cc	0.244	0.246	0.239
Reconstituted Tob., %	22	22	22
E.S., %	None	None	None
Expanded Tobacco, %	13	13	13

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

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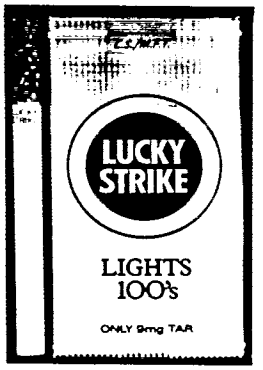
PRICE TIER CHANGES

AMERICAN TOBACCO CO.
LUCKY STRIKE LIGHTS

American is marketing **Lucky Strike Lights** packings at generic pricing in Arkansas, Louisiana, Mississippi and Tennessee; and at subgeneric pricing in Des Moines, Iowa. The test market and national products are analytically similar. Pack graphics did not change.



	Lucky Strike Lights	
	King Size (Soft Pack)	100 (Soft Pack)
SMOKE		
Butt Length, mm	33.0	35.0
FTC Tar, mg/cigt.	8.2	9.7
Nicotine, mg/cigt.	0.65	0.80
Puffs/cigt.	7.8	10.4
Filtration Eff., %	60	59
Filler Rod TPM, mg/cigt.	29.8	28.7
CO, mg/cigt.	8.4	9.4
CIGARETTE		
Total RTD, mm of H_2O	124	123
Static Burn. Time, min.	7.4	7.4
Length, mm	82.8	99.8
Circumference, mm	25.0	24.5
PAPER		
Components		
Type	Cit.	Cit.
Percent	1.0	1.0
Permeability, ml/cm^2 x min.	47	44
FILTER		
Type	CA	CA
RTD, mm of H_2O	112	106
Length, mm	24.8	26.8
Weight, g	0.17	0.16
Fiber denier/shape	2.5/Y	2.8/Y
Tipping paper length, mm	30.0	32.0
Tipping paper color	Cork	Cork
Ventilation, %	32	37
Type/Rows of Holes	L/1	L/1
FILLER		
Total alkaloids, % (DWB)	2.06	2.01
Total red. sugars, % (DWB)	9.2	9.0
Wt. of tob., g (12.5% OV)	0.671	0.824
Rod Density, g/cc	0.233	0.236
Reconstituted Tob., %	22	22
E.S., %	None	None
Expanded Tobacco, %	16	16

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CIGARETTES ON MARKET WITH TAR AND NICOTINE DATA LISTED ON PACK

	Tar, mg/cigt.			Nicotine, mg/cigt.		
	Listed On Package	FTC Data[1]	CI Data	Listed On Package	FTC Data[1]	CI Data
AMERICAN						
Ultra Carlton 85 (Box)	0.01	<0.5	0.1	0.002	<0.05	0.00
Carlton Menthol 85	1	<0.5	1	0.1	0.1	0.1
Carlton 100 (Box)	1	<0.5	2	0.1	0.1	0.1
Carlton 100 Menthol (Box)	1	<0.5	2	0.1	0.1	0.2
Carlton 85	1	1	2	0.1	0.1	0.1
Carlton Menthol 100	2	4	3	0.2	0.4	0.3
Carlton 100	2	3	2	0.2	0.3	0.2
Carlton Menthol 120	6	6	6	0.6	0.6	0.5
Carlton 120	6	6	6	0.6	0.6	0.5
Lucky Strike Lights 85	8	8	8	-	0.7	0.7
Lucky Strike Lights 100	9	9	9	-	0.8	0.7
Tareyton Lights 85	5	5	6	-	0.4	0.5
LORILLARD						
Triumph Menthol 85	2	3	4	0.3	0.4	0.4
Triumph 85	3	3	4	0.4	0.3	0.3
Triumph 100	4	5	5	0.5	0.5	0.5
Triumph Menthol 100	4	6	6	0.5	0.5	0.5
PHILIP MORRIS						
B&H DeLuxe Ultra Lts. 100(Box)	6	5	6	0.6	0.5	0.5
B&H DeLuxe Ultra Lts. Menthol 100 (Box)	6	5	6	0.6	0.5	0.5
Cambridge Ultra Low Tar 100	5	4	5	-	0.4	0.4
Merit Ultra Lights 85	5	5	5	0.5	0.5	0.5
Merit Ultra Lights 85 (Box)	5	5	5	0.5	0.5	0.5
Merit Ultra Lights Men. 85	5	5	5	0.5	0.5	0.5
Merit Ultra Lights 100	6	5	6	0.6	0.5	0.5
Merit Ultra Lights 100 (Box)	6	6	6	0.6	0.6	0.5
Merit Ultra Lights Men. 100	6	5	5	0.6	0.5	0.5
Merit 85	8	8	8	0.6	0.6	0.6
Merit 85 (Box)	8	9	8	0.6	0.7	0.6
Merit Menthol 85	8	8	8	0.6	0.6	0.6
Merit 100	10	10	10	0.8	0.8	0.8
Merit Menthol 100	10	10	10	0.8	0.8	0.8
REYNOLDS						
Now 80 (Box)	<0.5	<0.5	0.1	-	<0.05	0.00
Now 85	1	1	1	-	0.1	0.1
Now Menthol 85	1	1	1	-	0.1	0.1
Now 100	2	2	2	-	0.2	0.2
Now Menthol 100	2	2	2	-	0.2	0.3
Vantage Ultra Lights 85	5	5	5	-	0.4	0.5
Vantage Ultra Lights 100	5	5	5	-	0.4	0.5
BROWN & WILLIAMSON						
Barclay 85	3	-	4[2]	-	-	0.4[2]
Barclay 100	5	-	5[2]	-	-	0.5[2]

[1] FTC data published February, 1991.

[2] These products were smoked using the new Coresta holder designed for channel ventilated cigarettes.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CIGARETTE BRANDS RANKED ACCORDING TO SIZE AND SALES[1]
PHILIP MORRIS DATA

	SALES	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
120 MM FILTER PLAIN			
More	1.93	16.8	1.28
VA SLIMS LIGHTS (BOX)	1.66	13.9	1.04
SARATOGA (BOX)	0.66	14.5	1.04
Carlton	0.53	5.9	0.55
120 MM FILTER MENTHOL			
More Men.	1.74	18.1	1.47
VA SLIMS LIGHTS MEN.(BOX)	1.21	13.5	1.04
Carlton Men.	0.53	6.0	0.54
SARATOGA MEN. (BOX)	0.30	13.9	0.98
100 MM FILTER PLAIN			
MARLBORO LIGHTS	9.45	10.4	0.77
MARLBORO	8.04	16.5	1.16
Winston	6.28	17.3	1.15
MARLBORO LIGHTS (BOX)	5.86	10.9	0.83
Winston Lights	5.74	11.1	0.83
Doral Lights	4.66	11.9	0.99
BENSON & HEDGES	3.82	16.4	1.14
MERIT	3.32	9.8	0.75
Doral Full Flavor	3.20	15.8	1.20
B & H DELUXE ULTRA LTS (BOX)	3.10	5.3	0.45
CAMBRIDGE LIGHTS	2.92	11.9	0.85
Carlton	2.56	2.4	0.24
Now	2.50	2.4	0.24
MERIT ULTRA LIGHTS	2.44	5.8	0.50
Vantage	2.41	9.0	0.71
B & H LIGHTS	2.35	10.7	0.81
Vantage Ultra Lights	2.19	5.1	0.46
CAMBRIDGE ULTRA LOW TAR	2.09	4.2	0.37
CAMBRIDGE FULL FLAVOR	2.05	16.5	1.08
Pall Mall	1.93	15.6	1.17
Kent	1.71	13.0	0.94
Winston Ultra Lights	1.68	4.5	0.43
Viceroy	1.56	17.4	1.20
Kent III	1.43	4.7	0.44
Carlton (Box)	1.41	1.3	0.14
Camel Lights	1.30	11.3	0.83
True	1.17	6.9	0.57
Kent Golden Lights	1.08	9.4	0.81
Pyramid Lights	1.06	11.8	0.94
Pyramid Ultra Lights	1.06	6.1	0.50
BRISTOL LIGHTS	0.97	10.5	0.86
Doral Ultra Lights	0.86	5.5	0.52
Raleigh	0.72	15.5	0.96
Malibu Lights	0.71	9.8	0.83
Viceroy Lights	0.71	12.3	0.93
American Lights	0.70	12.5	1.00
MERIT ULTRA LIGHTS (BOX)	0.48	5.8	0.48
Malibu Ultra Lights	0.43	6.0	0.51
Winston Lights (Box)	0.42	9.8	0.78
American Filters	0.41	16.8	1.27
Barclay	0.41	5.3	0.47
Malibu	0.40	16.3	1.24
Newport Stripes (Box)	0.38	11.8	0.94
B & H LIGHTS 100 (BOX)	0.26	11.3	0.88
L & M	0.24	11.9	0.90
Raleigh Lights	0.21	12.8	0.97

	SALES	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
100 MM FILTER MENTHOL			
Salem Lights	5.52	8.8	0.72
Kool	4.65	16.2	1.13
Salem	4.63	16.6	1.21
BENSON & HEDGES MEN.	4.30	15.9	1.12
Newport	3.46	18.7	1.43
Doral Lights Men.	2.70	10.2	0.82
Salem Ultra Lights	2.50	5.1	0.44
B & H DELUXE ULTRA LTS (BOX)	2.26	5.7	0.45
B & H LIGHTS MEN.	2.15	10.4	0.77
CAMBRIDGE LIGHTS MEN.	1.61	11.8	0.82
Now Men.	1.26	2.3	0.23
ALPINE LIGHTS	1.03	9.7	0.74
ALPINE	0.77	15.1	1.04
Doral Full Flavor Men.	0.77	16.6	1.25
True Men.	0.65	6.5	0.57
Malibu (Low Tar) Menthol	0.61	12.3	0.98
Belair	0.60	9.3	0.68
MERIT ULTRA LIGHTS MEN.	0.60	5.4	0.48
MERIT MEN.	0.58	10.0	0.78
BRISTOL LIGHTS	0.55	11.0	0.90
Kool Lights	0.50	8.6	0.69
MARLBORO LIGHTS MEN. (BOX)	0.49	9.4	0.75
Salem Lights (Box)	0.46	11.9	0.90
Newport Stripes Men. (Box)	0.45	11.5	0.87
Pyramid Lights Men.	0.43	11.7	0.91
Kool Ultra	0.37	9.3	0.63
Newport Lights	0.32	9.1	0.78
B&H LIGHTS 100 MEN (BOX)	0.25	11.0	0.81
Vantage Men.	0.24	9.1	0.69
100 MM FILTER SLIM			
VIRGINIA SLIMS	2.49	14.3	1.01
VA SLIMS LIGHTS (BOX)	2.22	8.1	0.63
VA SLIMS UL (BOX)	1.47	5.9	0.49
Capri (Box)	1.26	9.5	0.69
VA SLIMS SUPERSLIMS (BOX)	0.54	6.9	0.50
More Lights (Box)	0.23	9.8	0.79
100 MM FILTER SLIM MENTHOL			
VA SLIMS LIGHTS MEN.(BOX)	2.53	8.6	0.66
Salem Slim Lights (Box)	2.48	8.9	0.69
VIRGINIA SLIMS MEN.	2.10	14.4	0.99
VA SLIMS UL MEN (BOX)	1.18	5.7	0.47
Capri Men (Box)	1.06	9.5	0.69
VA SLIMS SUPERSLIMS MEN (BOX)	0.61	6.6	0.48
More Lights Men. (Box)	0.18	9.2	0.72

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CIGARETTE BRANDS RANKED ACCORDING TO SIZE AND SALES[1]
PHILIP MORRIS DATA

	SALES	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
100 MM FILTER CHARCOAL			
PARLIAMENT LIGHTS	1.74	11.8	0.93
Tareyton	1.41	13.9	1.03
Lark Lights	0.22	12.9	0.94
Tareyton Long Lights	0.18	8.6	0.72
85 MM FILTER CHARCOAL			
Tareyton	1.53	13.9	1.00
Lark Lights	0.31	11.6	0.83
B&H MULTIFILTER	0.15	10.6	0.84
85 MM FILTER PLAIN			
MARLBORO	27.14	15.9	1.07
MARLBORO LIGHTS	21.27	11.0	0.80
MARLBORO LIGHTS (BOX)	18.85	11.0	0.78
Winston	18.70	18.9	1.52
Winston Lights	8.60	10.7	0.77
Camel Lights	5.10	11.7	0.83
Camel	5.05	14.8	1.04
Vantage	4.88	9.0	0.67
MERIT	4.21	7.7	0.58
Doral Lights	3.32	10.7	0.86
MERIT ULTRA LIGHTS	3.13	5.1	0.45
Viceroy	2.91	16.7	1.20
Doral Ultra Lights	2.68	5.4	0.51
Kent	2.44	12.9	0.88
Doral Full Flavor	2.37	15.6	1.16
CAMBRIDGE LIGHTS	2.02	12.3	0.83
Vantage Ultra Lights	1.99	5.2	0.45
Carlton	1.77	1.3	0.14
CAMBRIDGE FULL FLAVOR	1.61	16.4	1.08
True	1.53	4.6	0.41
MERIT (BOX)	1.30	8.1	0.62
Kent III	1.25	3.6	0.36
Winston Ultra Lights	1.25	6.4	0.58
Kent Golden Lights	1.20	8.2	0.68
L & M	1.01	12.7	0.94
Raleigh	0.95	14.7	0.91
Now	0.91	0.9	0.14
Pyramid Lights	0.89	11.2	0.82
PARLIAMENT LIGHTS	0.85	9.6	0.72
BRISTOL LIGHTS	0.83	10.4	0.80
Magna	0.69	15.8	1.18
MERIT ULTRA LIGHTS (BOX)	0.69	5.0	0.44
Viceroy Lights	0.65	11.9	0.90
Barclay	0.59	3.1	0.34
Old Gold	0.55	16.6	1.22
Magna Lites	0.49	12.8	0.92
American Lights	0.40	12.0	0.95
American Filters	0.27	16.5	1.28
Lucky Strike	0.24	13.4	1.03
Raleigh Lights	0.18	11.4	0.89
Malibu Lights	0.17	9.5	0.79
Malibu	0.14	15.8	1.22

	SALES	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
85 MM FILTER MENTHOL			
Kool	12.37	16.3	1.05
Newport	9.08	18.0	1.33
Salem Lights	7.43	10.6	0.74
Salem	7.43	17.3	1.27
Kool Milds	3.43	11.7	0.88
Salem Ultra Lights	1.65	5.0	0.45
Doral Lights Men.	1.37	10.6	0.84
MARLBORO MEN.	1.23	15.2	0.99
Newport Lights	1.17	8.7	0.71
MERIT ULTRA LIGHTS MEN.	0.85	5.2	0.43
Vantage Men.	0.84	9.9	0.72
Belair	0.81	10.5	0.77
MARLBORO LIGHTS MEN (BOX)	0.69	9.9	0.75
CAMBRIDGE LIGHTS MEN.	0.68	11.9	0.86
True Men.	0.67	4.3	0.39
ALPINE LIGHTS	0.66	9.5	0.69
MERIT MEN.	0.65	8.2	0.62
ALPINE	0.62	16.0	0.97
Kool Lights	0.60	8.0	0.65
Doral Full Flavor Men.	0.55	17.4	1.24
Carlton Men.	0.53	1.2	0.12
BRISTOL LIGHTS	0.35	10.5	0.83
Kool Ultra	0.35	5.3	0.41
Now Men.	0.31	1.0	0.12
80 MM FILTER (BOX)			
MARLBORO (BOX)	34.57	16.3	1.10
Winston (Box)	2.26	16.3	1.12
Camel Lights (Box)	1.95	9.7	0.63
PARLIAMENT LIGHTS (BOX)	1.73	9.2	0.69
Winston Lights (Box)	0.88	9.0	0.63
Kool Milds (Box)	0.61	11.3	0.88
Magna (Box)	0.54	13.5	0.82
Magna Lites (Box)	0.36	8.8	0.66
85 MM NONFILTER			
Pall Mall	8.91	23.3	1.53
Chesterfield King	0.88	21.0	1.29
Pyramid	0.64	20.7	1.24
COMMANDER KING SIZE	0.26	24.8	1.49
70 MM NONFILTER			
Camel	6.32	21.5	1.51
Lucky Strike	2.14	23.7	1.52

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FEDERAL TRADE COMMISSION DATA PUBLISHED FEBRUARY, 1991
ALPHABETICAL LISTING OF BRANDS WITH TAR AND NICOTINE CONTENT

Tar and Nicotine Content of Two Hundred Sixty Two (262) Varieties of Domestic Cigarettes

BRAND	TYPE*	TAR, MG/CIGT.	NICOTINE, MG/CIGT.
ALPINE	F,M,SP, 85 mm	17	1.1
ALPINE	F,M,SP,100 mm	15	1.1
ALPINE LIGHTS	F,M,SP, 85 mm	9	0.7
ALPINE LIGHTS	F,M,SP, 100 mm	9	0.8
American Filters	F,SP, 85 mm	16	1.2
American Filters	F,SP, 100 mm	16	1.2
American Lights	F,SP, 85 mm	12	0.9
American Lights	F,SP, 100 mm	12	1.0
Belair	F,M,SP, 85 mm	10	0.8
Belair	F,M,SP, 100 mm	8	0.6
BENSON & HEDGES	F,HP, 85 mm	15	1.2
BENSON & HEDGES 100's	F,HP, 100 mm	16	1.2
BENSON & HEDGES 100's	F,M,HP, 100 mm	16	1.2
BENSON & HEDGES 100's	F,SP, 100 mm	17	1.2
BENSON & HEDGES 100's	F,M,SP, 100 mm	16	1.2
BENSON & HEDGES LIGHTS	F,SP, 100 mm	11	0.8
BENSON & HEDGES LIGHTS	F,M,SP, 100 mm	11	0.9
B & H LIGHTS (BOX)	F,HP, 100 mm	11	0.9
B & H LIGHTS MEN. (BOX)	F,M,HP, 100 mm	10	0.8
B & H DELUXE ULTRA LTS.	F,HP, 100 mm	5	0.5
B & H DELUXE ULTRA LTS.	F,M,HP, 100 mm	5	0.5
B & H MULTIFILTER	F,SP, 85 mm	11	0.9
Bristol Lights	F,SP, 85 mm	11	0.9
Bristol Lights	F,M,SP, 85 mm	11	0.9
Bristol Lights	F,SP, 100 mm	11	0.9
Bristol Lights	F,M,SP, 100 mm	11	0.9
CAMBRIDGE FULL FLAVOR	F,SP, 85 mm	17	1.1
CAMBRIDGE FULL FLAVOR	F,SP, 100 mm	17	1.2
CAMBRIDGE LIGHTS	F,SP, 85 mm	12	0.9
CAMBRIDGE LIGHTS	F,M,SP, 85 mm	12	0.9
CAMBRIDGE LIGHTS	F,SP, 100 mm	12	0.9
CAMBRIDGE LIGHTS	F,M,SP, 100 mm	12	0.9
CAMBRIDGE ULTRA LOW TAR	F,SP, 100 mm	4	0.4
Camel	NF,SP, 70 mm	22	1.4
Camel	F,HP, 80 mm	17	1.0
Camel	F,SP, 85 mm	15	1.0
Camel Lights	F,HP, 85 mm	9	0.6
Camel Lights	F,SP, 85 mm	9	0.7
Camel Lights	F,SP, 100 mm	11	0.8
Capri	F,HP, 100 mm	10	0.8
Capri	F,M,HP, 100 mm	9	0.8
Ultra Carlton	F,HP, 85 mm	**	**
Carlton	F,SP, 85 mm	1	0.1
Carlton	F,M,SP, 85 mm	<0.5	0.1
Carlton	F,HP, 100 mm	<0.5	0.1
Carlton	F,M,HP, 100 mm	<0.5	0.1
Carlton	F,SP, 100 mm	3	0.3
Carlton	F,M,SP, 100 mm	4	0.4
Carlton	F,SP, 120 mm	6	0.6
Carlton	F,M,SP, 120 mm	6	0.6
Century 25's	F,SP, 85 mm	15	1.0
Century 25's	F,SP, 100 mm	17	1.1
Century Lights 25's	F,SP, 85 mm	9	0.7
Century Lights 25's	F,SP, 100 mm	12	0.9
Chesterfield	NF,SP, 70 mm	20	1.3
Chesterfield	NF,SP, 85 mm	24	1.6
COMMANDER KING SIZE	NF,SP, 85 mm	26	1.7
COMMANDER REGULAR	NF,SP, 70 mm	24	1.4
Doral Full Flavor	F,SP, 85 mm	16	1.0
Doral Full Flavor	F,M,SP, 85 mm	16	1.1
Doral Full Flavor	F,SP, 100 mm	16	1.1
Doral Filter Lights	F,SP, 85 mm	10	0.7
Doral Filter Lights	F,M,SP, 85 mm	10	0.7
Doral Filter Lights	F,SP, 100 mm	10	0.8
Doral Filter Lights	F,M,SP, 100 mm	11	0.9
Doral Ultra Lights	F,SP, 100 mm	5	0.5
English Ovals	NF,HP, 70 mm	23	1.8
Eve Slim Lights	F,HP, 100 mm	13	1.0
Eve Slim Lights	F,M,HP, 100 mm	13	1.0
Eve Lights	F,HP, 120 mm	13	1.1
Eve Lights	F,M,HP, 120 mm	13	1.1
Herbert Tareyton	NF,SP, 85 mm	25	1.6
HI-LITE	F,HP, 100 mm	13	1.1
Kent Golden Lights	F,HP, 85 mm	8	0.7
Kent Golden Lights	F,SP, 85 mm	8	0.7
Kent Golden Lights	F,M,SP, 85 mm	8	0.7
Kent Golden Lights	F,HP, 100 mm	9	0.8
Kent Golden Lights	F,SP, 100 mm	9	0.8
Kent Golden Lights	F,M,SP, 100 mm	10	0.9
Kent	F,HP, 80 mm	11	0.8
Kent	F,SP, 85 mm	12	0.9
Kent	F,SP, 100 mm	14	1.0
Kent	F,M,SP, 100 mm	14	1.0
Kent III	F,SP, 85 mm	3	0.3
Kent III	F,HP, 100 mm	5	0.5
Kent III	F,SP, 100 mm	5	0.5
Kool	NF,M,SP, 70 mm	22	1.4
Kool	F,M,HP, 80 mm	16	1.1
Kool	F,M,SP, 85 mm	17	1.2
Kool	F,M,SP, 100 mm	17	1.3
Kool Lights	F,M,SP, 85 mm	8	0.7
Kool Lights	F,M,SP, 100 mm	9	0.7
Kool Milds	F,M,HP, 80 mm	11	0.9
Kool Milds	F,M,SP, 85 mm	12	0.9
Kool Milds	F,M,SP, 100 mm	12	0.9
L & M	F,SP, 85 mm	14	1.0
L & M Super	F,SP, 100 mm	14	1.1
Lark	F,C,SP, 85 mm	14	1.1
Lark	F,C,SP, 100 mm	14	1.2
Lark Lights	F,C,SP, 85 mm	13	1.0
Lark Lights	F,C,SP, 100 mm	13	1.1
Lucky Strike	NF,SP, 70 mm	25	1.6
Lucky Strike	F,HP, 85 mm	12	0.9
Lucky Strike	F,SP, 85 mm	12	0.9
Lucky Strike	F,M,SP, 100 mm	12	1.0
Lucky Strike Lights	F,SP, 85 mm	8	0.7
Lucky Strike Lights	F,SP, 100 mm	9	0.8
Magna	F,HP, 80 mm	14	0.9
Magna	F,SP, 85 mm	14	0.9
Magna Lites	F,SP, 85 mm	9	0.7
Magna Lites	F,HP, 80 mm	13	0.9
Malibu	F,SP, 85 mm	17	1.2
Malibu	F,M,SP, 85 mm	16	1.2
Malibu	F,SP, 100 mm	14	1.1
Malibu	F,M,SP, 100 mm	11	0.9
Malibu Lights	F,SP, 85 mm	10	0.8
Malibu Lights	F,SP, 100 mm	9	0.8
Malibu Ultra Lights	F,SP, 100 mm	6	0.5
MARLBORO	F,HP, 80 mm	17	1.2
MARLBORO	F,SP, 85 mm	17	1.2
MARLBORO	F,M,SP, 85 mm	16	1.2
MARLBORO	F,HP, 100 mm	17	1.2
MARLBORO	F,SP, 100 mm	16	1.2
MARLBORO 25'S	F,SP, 85 mm	17	1.2
MARLBORO LIGHTS	F,HP, 85 mm	11	0.9
MARLBORO LIGHTS	F,SP, 85 mm	11	0.9
MARLBORO LIGHTS	F,HP, 100 mm	11	0.9
MARLBORO LIGHTS	F,M,HP, 85 mm	10	0.8
MARLBORO LIGHTS	F,SP,100 mm	11	0.9
MARLBORO LIGHTS	F,M,HP, 100 mm	11	0.9
MARLBORO LIGHTS 25's	F,SP, 85 mm	11	0.8
Max	F,SP, 120 mm	17	1.3
Max	F,M,SP, 120 mm	17	1.3
MERIT	F,HP, 85 mm	9	0.7
MERIT	F,SP, 85 mm	8	0.6
MERIT	F,M,SP, 85 mm	8	0.6
MERIT	F,SP, 100 mm	10	0.8

*F = Filter; NF = nonfilter; C = Charcoal; M = Menthol; HP = hard pack; SP = soft pack; mm = millimeter
**Indicates "tar" below 0.5 mg; nicotine below 0.05 mg per cigarette.

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FEDERAL TRADE COMMISSION DATA PUBLISHED FEBRUARY, 1991
ALPHABETICAL LISTING OF BRANDS WITH TAR AND NICOTINE CONTENT (cont.)

BRAND	TYPE*	TAR, MG/CIGT.	NICOTINE, MG/CIGT.
MERIT	F,M,SP, 100 mm	10	0.8
MERIT ULTRA LIGHTS	F,SP, 85 mm	5	0.5
MERIT ULTRA LIGHTS	F,HP, 85 mm	5	0.5
MERIT ULTRA LIGHTS	F,M,SP, 85 mm	5	0.5
MERIT ULTRA LIGHTS	F,SP, 100 mm	5	0.5
MERIT ULTRA LIGHTS	F,HP, 100 mm	6	0.6
MERIT ULTRA LIGHTS	F,M,SP, 100 mm	5	0.5
More	F,SP, 120 mm	17	1.2
More	F,M,SP, 120 mm	17	1.3
More Lights	F,HP, 100 mm	10	0.8
More Lights	F,M,HP, 100 mm	9	0.7
Newport	F,M,HP, 80 mm	16	1.2
Newport	F,M,SP, 85 mm	17	1.2
Newport	F,M,HP, 100 mm	19	1.4
Newport	F,M,SP, 100 mm	18	1.4
Newport 25's	F,M,SP, 85 mm	17	1.2
Newport 25's	F,M,SP, 100 mm	19	1.4
Newport Lights	F,M,HP, 80 mm	8	0.7
Newport Lights	F,M,SP, 85 mm	8	0.7
Newport Lights	F,M,HP, 100 mm	9	0.8
Newport Lights	F,M,SP, 100 mm	9	0.8
Newport Stripes	F,HP, 100 mm	12	0.9
Newport Stripes	F,M,HP, 100 mm	12	0.9
Now	F,HP, 80 mm	**	**
Now	F,SP, 85 mm	1	0.1
Now	F,M,SP, 85 mm	1	0.1
Now	F,SP, 100 mm	2	0.2
Now	F,M,SP, 100 mm	2	0.2
Old Gold Straights	NF,SP, 85 mm	26	1.8
Old Gold Filters	F,SP, 85 mm	17	1.2
Old Gold Filters	F,SP, 100 mm	18	1.4
Old Gold Lights	F,SP, 85 mm	9	0.8
Pall Mall	NF,SP, 85 mm	25	1.7
Pall Mall	F,SP, 100 mm	18	1.3
Pall Mall Light	F,SP, 100 mm	10	0.9
Pall Mall Red	F,SP, 85 mm	15	1.1
PARLIAMENT LIGHTS	F,HP, 80 mm	9	0.7
PARLIAMENT LIGHTS	F,SP, 85 mm	9	0.8
PARLIAMENT LIGHTS	F,C,SP, 100 mm	12	1.0
P.M. INTERNATIONAL	F,HP, 100 mm	17	1.3
P.M. INTERNATIONAL	F,M,HP, 100 mm	17	1.3
PLAYERS	NF,HP, 70 mm	25	1.7
PLAYERS	F,HP, 85 mm	12	0.9
PLAYERS	F,M,HP, 85 mm	12	0.9
PLAYERS	F,HP, 100 mm	14	1.0
PLAYERS	F,M,HP, 100 mm	14	1.0
PLAYERS LIGHTS 25's	F,SP, 85 mm	10	0.8
PLAYERS LIGHTS 25's	F,M,SP, 85 mm	10	0.7
PLAYERS LIGHTS 25's	F,SP, 100 mm	12	0.9
PLAYERS LIGHTS 25's	F,M,SP, 100 mm	12	0.9
Pyramid	NF,SP, 85 mm	23	1.5
Pyramid Lights	F,SP, 85 mm	14	1.1
Pyramid Ultra Lights	F,SP, 100 mm	6	0.6
Pyramid Lights	F,SP, 100 mm	13	1.1
Pyramid Lights Menthol	F,M,SP, 100 mm	12	1.1
Raleigh	NF,SP, 85 mm	25	1.5
Raleigh	F,SP, 85 mm	15	1.0
Raleigh	F,SP, 100 mm	16	1.0
Raleigh Lights	F,SP, 85 mm	11	0.9
Raleigh Lights	F,SP, 100 mm	12	0.9
Richland 25's	F,SP, 85 mm	17	1.2
Richland 25's	F,M,SP, 85 mm	16	1.0
Richland 25's	F,SP, 100 mm	18	1.4
Richland Lights 25's	F,SP, 85 mm	12	0.9
Richland Lights 25's	F,SP, 100 mm	13	1.0
Ritz	F,HP, 100 mm	10	0.8
Ritz	F,M,HP, 100 mm	11	0.8
Salem	F,M,SP, 85 mm	17	1.2
Salem	F,M,SP, 100 mm	16	1.2
Salem Lights	F,M,SP, 85 mm	9	0.7
Salem Lights	F,M,HP 100 mm	11	0.8
Salem Lights	F,M,SP, 100 mm	8	0.7
Salem Slim Lights	F,M,HP, 100 mm	10	0.7
Salem Ultra Lights	F,M,SP, 85 mm	5	0.4
Salem Ultra Lights	F,M,SP, 100 mm	4	0.4
SARATOGA	F,HP, 120 mm	15	1.2
SARATOGA	F,M,HP, 120 mm	15	1.1
Satin	F,SP, 100 mm	11	0.9
Satin	F,M,SP, 100 mm	11	0.9
Silva Thins	F,SP, 100 mm	12	1.0
Silva Thins	F,M,SP, 100 mm	12	1.1
Spring	F,M,SP, 100 mm	18	1.4
Tall	F,SP, 120 mm	19	1.6
Tall	F,M,SP, 120 mm	18	1.6
Tareyton	F,C,SP, 85 mm	14	1.0
Tareyton	F,C,SP, 100 mm	14	1.0
Tareyton Lights	F,C,SP, 85 mm	5	0.4
Tareyton Long Lts.	F,C,SP, 100 mm	8	0.7
Triumph	F,SP, 85 mm	3	0.3
Triumph	F,M,SP, 85 mm	3	0.4
Triumph	F,SP, 100 mm	5	0.5
Triumph	F,M,SP, 100 mm	6	0.5
True	F,SP, 85 mm	5	0.5
True	F,M,SP, 85 mm	5	0.5
True	F,SP, 100 mm	6	0.6
True	F,M,SP, 100 mm	6	0.6
Vantage	F,SP, 85 mm	10	0.7
Vantage	F,M,SP, 85 mm	10	0.7
Vantage	F,SP, 100 mm	9	0.6
Vantage	F,M,SP, 100 mm	8	0.6
Vantage Ultra Lts.	F,SP, 85 mm	5	0.4
Vantage Ultra Lts.	F,SP, 100 mm	5	0.4
Viceroy	F,SP, 85 mm	17	1.1
Viceroy Super Long	F,SP, 100 mm	16	1.2
Viceroy Lights	F,SP, 85 mm	11	0.9
Viceroy Lights	F,SP, 100 mm	12	0.9
VIRGINIA SLIMS	F,SP, 100 mm	15	1.1
VIRGINIA SLIMS	F,M,SP, 100 mm	15	1.2
VIRGINIA SLIMS LTS.	F,HP, 100 mm	9	0.7
VIRGINIA SLIMS LTS.	F,M,HP, 100 mm	9	0.7
VIRGINIA SLIMS LTS.	F,HP, 120 mm	14	1.1
VIRGINIA SLIMS LTS.	F,M,HP, 120 mm	14	1.1
VA. SLIMS SUPERSLIMS	F,HP, 100 mm	6	0.4
VA. SLIMS SUPERSLIMS	F,M,HP, 100 mm	6	0.4
VA. SLIMS ULTRA LTS.	F,HP, 100 mm	5	0.5
VA. SLIMS ULTRA LTS.	F,M,HP, 100 mm	5	0.4
Winston	F,HP, 80 mm	17	1.1
Winston	F,SP, 85 mm	17	1.1
Winston	F,SP, 100 mm	17	1.1
Winston Lights	F,HP, 80 mm	10	0.7
Winston Lights	F,SP, 85 mm	10	0.7
Winston Lights	F,HP, 100 mm	10	0.6
Winston Lights	F,SP, 100 mm	11	0.8
Winston Ultra Lts.	F,SP, 85 mm	5	0.5
Winston Ultra Lts.	F,SP, 100 mm	5	0.4

TAR RANKING

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PHILIP MORRIS DATA

BRANDS RANKED ACCORDING TO FTC TAR

	BRAND	SIZE	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
1.	Ultra Carlton (Box)	KF	0.1	0.00
2.	Now (Box)	LF	0.1	0.00
3.	Now	KF	0.9	0.14
4.	Now Men.	KFM	1.0	0.12
5.	Carlton Men.	KFM	1.2	0.12
6.	Carlton	KF	1.3	0.14
7.	Carlton (Box)	100	1.3	0.14
8.	Carlton Men. (Box)	100M	1.6	0.15
9.	Now Men.	100M	2.3	0.23
10.	Carlton	100	2.4	0.24
11.	Now	100	2.4	0.24
12.	Barclay	KF	3.1	0.34
13.	Carlton Men.	100M	3.3	0.29
14.	Triumph	KF	3.6	0.33
15.	Kent III	KF	3.6	0.36
16.	Triumph Men.	KFM	3.9	0.36
17.	CAMBRIDGE ULTRA LOW TAR	100	4.2	0.37
18.	True Men.	KFM	4.3	0.39
19.	Winston Ultra Lights	100	4.5	0.43
20.	True	KF	4.6	0.41
21.	Kent III	100	4.7	0.44
22.	MERIT ULTRA LIGHTS (BOX)	KF	5.0	0.44
23.	Salem Ultra Lights	KFM	5.0	0.45
24.	Salem Ultra Lights	100M	5.1	0.44
25.	MERIT ULTRA LIGHTS	KF	5.1	0.45
26.	Vantage Ultra Lights	100	5.1	0.46
27.	MERIT ULTRA LIGHTS MEN.	KFM	5.2	0.43
28.	Vantage Ultra Lights	KF	5.2	0.45
29.	Triumph	100	5.2	0.46
30.	Kool Ultra	KFM	5.3	0.41
31.	B&H DELUXE U.L. (BOX)	100	5.3	0.45
32.	Barclay 100	100	5.3	0.47
33.	Kent III (Box)	100	5.4	0.47
34.	MERIT ULTRA LIGHTS MEN.	100M	5.4	0.48
35.	Doral Ultra Lights	KF	5.4	0.51
36.	Doral Ultra Lights	100	5.5	0.52
37.	Triumph Men.	100M	5.6	0.47
38.	B&H DELUXE U.L. MEN.(BOX)	100M	5.7	0.45
39.	VIRGINIA SLIMS UL MEN	100M	5.7	0.47
40.	MERIT ULTRA LIGHTS (BOX)	100	5.8	0.48
41.	MERIT ULTRA LIGHTS	100	5.8	0.50
42.	VIRGINIA SLIMS ULTRA LTS	100	5.9	0.49
43.	Tareyton Lights	KFC	5.9	0.50
44.	Carlton	120	5.9	0.55
45.	Malibu Ultra Lights	100	6.0	0.51
46.	Carlton Men.	120M	6.0	0.54
47.	Pyramid Ultra Lights	100	6.1	0.50
48.	Winston Ultra Lights	KF	6.4	0.58
49.	True Men.	100M	6.5	0.57
50.	VA SLIMS SUPERSLIMS (BOX)	100M	6.6	0.48
51.	VA SLIMS SUPERSLIMS (BOX)	100	6.9	0.50
52.	True	100	6.9	0.57
53.	MERIT	KF	7.7	0.58
54.	Kent Golden Lights (Box)	LF	7.8	0.68
55.	Newport Lights (Box)	LFM	7.9	0.66
56.	Kool Lights	KFM	8.0	0.65
57.	MERIT (BOX)	KF	8.1	0.62
58.	VA SLIMS LIGHTS (BOX)	100	8.1	0.63
59.	Old Gold Lights	KF	8.1	0.73
60.	MERIT MEN.	KFM	8.2	0.62
61.	Lucky Strike Lights	KF	8.2	0.66
62.	Kent Golden Lights Men.	KFM	8.2	0.67
63.	Kent Golden Lights	KF	8.2	0.68
64.	Century Lights 25's	KF	8.2	0.70
65.	VA SLIMS LIGHTS MEN.(BOX)	100M	8.6	0.66
66.	Kool Lights	100M	8.6	0.69
67.	Tareyton Long Lights	100C	8.6	0.72
68.	Newport Lights (Box)	100M	8.6	0.76
69.	Newport Lights	KFM	8.7	0.71
70.	Magna Lites (Box)	LF	8.8	0.66
71.	Salem Lights	100M	8.8	0.72
72.	Salem Slim Lights (Box)	100M	8.9	0.69
73.	Lucky Strike Lights	100	8.9	0.73
74.	Winston Lights (Box)	LF	9.0	0.63
75.	Vantage	KF	9.0	0.67
76.	Vantage	100	9.0	0.71
77.	Vantage Men.	100	9.1	0.69
78.	Newport Lights	100M	9.1	0.78
79.	PARLIAMENT LIGHTS (BOX)	LF	9.2	0.69
80.	More Lights Men. (Box)	100M	9.2	0.72
81.	Kool Ultra	100M	9.3	0.63
82.	Belair	100M	9.3	0.68
83.	MARLBORO LIGHTS MEN.(BOX)	100M	9.4	0.75
84.	Kent Golden Lights	100	9.4	0.81
85.	Capri (Box)	100	9.5	0.69
86.	Capri 100 Menthol	100M	9.5	0.69
87.	ALPINE LIGHTS	KFM	9.5	0.69
88.	Malibu Lights	KF	9.5	0.79
89.	Pall Mall Lights	100	9.5	0.80
90.	Kent Golden Lights (Box)	100	9.5	0.85
91.	PARLIAMENT LIGHTS	KF	9.6	0.72
92.	PLAYERS LIGHTS MEN. 25'S	KFM	9.6	0.75
93.	Camel Lights (Box)	LF	9.7	0.63
94.	ALPINE LIGHTS	100M	9.7	0.74
95.	Kent Golden Lights Men.	100M	9.7	0.81
96.	MERIT	100	9.8	0.75
97.	Winston Lights (Box)	100	9.8	0.78
98.	More Lights (Box)	100	9.8	0.79
99.	Malibu Lights	100	9.8	0.83
100.	Vantage Men.	KFM	9.9	0.72
101.	MARLBORO LIGHTS MEN.(BOX)	KFM	9.9	0.75
102.	PLAYERS LIGHTS 25's	KF	10.0	0.76
103.	MERIT MEN.	100M	10.0	0.78
104.	Doral Lights Men.	100M	10.2	0.82
105.	MARLBORO LIGHTS 25'S	KF	10.3	0.78
106.	MARLBORO LIGHTS	100	10.4	0.77
107.	B&H LIGHTS MEN.	100M	10.4	0.77
108.	BRISTOL LIGHTS	KF	10.4	0.80
109.	Belair	KFM	10.5	0.77
110.	BRISTOL LIGHTS MEN.	KFM	10.5	0.83
111.	BRISTOL LIGHTS	100	10.5	0.86
112.	Salem Lights	KFM	10.6	0.74
113.	B&H MULTIFILTER	KFC	10.6	0.84
114.	Doral Lights Men.	KFM	10.6	0.84
115.	Winston Lights	KF	10.7	0.77
116.	B&H LIGHTS	100	10.7	0.81
117.	Doral Lights	KF	10.7	0.86
118.	MARLBORO LIGHTS (BOX)	100	10.9	0.83
119.	MARLBORO LIGHTS (BOX)	KF	11.0	0.78
120.	MARLBORO LIGHTS	KF	11.0	0.80
121.	B&H LIGHTS 100 MEN (BOX)	100M	11.0	0.81
122.	Century Lights 25's	100	11.0	0.89
123.	BRISTOL LIGHTS MEN.	100M	11.0	0.90
124.	Winston Lights	100	11.1	0.83
125.	Pyramid Lights	KF	11.2	0.82
126.	PLAYERS MEN. (BOX)	KFM	11.2	0.86
127.	Camel Lights	100	11.3	0.83
128.	Kool Milds (Box)	LFM	11.3	0.88
129.	B & H LIGHTS 100 (BOX)	100	11.3	0.88
130.	Raleigh Lights	KF	11.4	0.89
131.	Eve Slim Lights Men.(Box)	100M	11.4	0.95
132.	Kent (Box)	LF	11.5	0.81
133.	Newport Stripes Men.(Box)	100M	11.5	0.87
134.	Richland Lights 25's	KF	11.5	0.89
135.	Eve Slim Lights (Box)	100	11.5	0.91
136.	Satin Men.	100M	11.5	0.95

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PHILIP MORRIS DATA

BRANDS RANKED ACCORDING TO FTC TAR

	BRAND	SIZE	FTC TAR, MG/CIGT.	NICOTINE, MG/CIGT.
137.	Lark Lights	KFC	11.6	0.83
138.	PLAYERS (BOX)	KF	11.6	0.88
139.	Silva Thins	100	11.6	0.97
140.	Camel Lights	KF	11.7	0.83
141.	Kool Milds	KFM	11.7	0.88
142.	PLAYERS LIGHTS 25'S	100	11.7	0.89
143.	Pyramid Lights Men.	100M	11.7	0.91
144.	CAMBRIDGE LIGHTS MEN.	100M	11.8	0.82
145.	Satin	100	11.8	0.92
146.	PARLIAMENT LIGHTS	100C	11.8	0.93
147.	Pyramid Lights	100	11.8	0.94
148.	Newport Stripes (Box)	100	11.8	0.94
149.	Silva Thins Men.	100M	11.8	0.97
150.	CAMBRIDGE LIGHTS	100	11.9	0.85
151.	CAMBRIDGE LIGHTS MEN.	KFM	11.9	0.86
152.	PLAYERS LIGHTS MEN. 25'S	100M	11.9	0.87
153.	Viceroy Lights	KF	11.9	0.90
154.	L&M	100	11.9	0.90
155.	Salem Lights (Box)	100M	11.9	0.90
156.	Doral Lights	100	11.9	0.99
157.	Kent Men.	100M	12.0	0.92
158.	American Lights	KF	12.0	0.95
159.	Kool Milds	100M	12.2	0.90
160.	Eve Lights (Box)	120	12.2	1.05
161.	CAMBRIDGE LIGHTS	KF	12.3	0.83
162.	Viceroy Lights	100	12.3	0.93
163.	Malibu (Low Tar) Menthol	100M	12.3	0.98
164.	Eve Lights Men. (Box)	120M	12.4	1.07
165.	American Lights	100	12.5	1.00
166.	Richland Lights 25's	100	12.6	0.90
167.	Lark	KFC	12.6	1.04
168.	L&M	KF	12.7	0.94
169.	Magna Lites	KF	12.8	0.92
170.	Raleigh Lights	100	12.8	0.97
171.	HI-LITE (BOX)	100	12.8	1.08
172.	Kent	KF	12.9	0.88
173.	Lark Lights	100C	12.9	0.94
174.	Lucky Strike	100	12.9	1.03
175.	Kent	100	13.0	0.94
176.	PLAYERS (BOX)	100	13.2	1.00
177.	St. Moritz	100	13.2	1.06
178.	PLAYERS MEN. (BOX)	100M	13.4	1.01
179.	St. Moritz Men.	100M	13.4	1.02
180.	Lucky Strike	KF	13.4	1.03
181.	Lucky Strike (Box)	KF	13.4	1.04
182.	Magna (Box)	LF	13.5	0.82
183.	VA SLIMS LIGHTS MEN.(BOX)	120M	13.5	1.04
184.	Lark	100C	13.5	1.07
185.	SARATOGA MEN. (BOX)	120M	13.9	0.98
186.	Tareyton	KFC	13.9	1.00
187.	Tareyton	100C	13.9	1.03
188.	VA SLIMS LIGHTS (BOX)	120	13.9	1.04
189.	Century 25's	KF	14.2	1.00
190.	VIRGINIA SLIMS	100	14.3	1.01
191.	VIRGINIA SLIMS MEN.	100M	14.4	0.99
192.	BENSON & HEDGES (BOX)	KF	14.4	1.25
193.	SARATOGA (BOX)	120	14.5	1.04
194.	Raleigh	KF	14.7	0.91
195.	Camel	KF	14.8	1.04
196.	Richland Men. 25's	KFM	14.9	0.97
197.	Pall Mall	KF	14.9	1.11
198.	ALPINE	100M	15.1	1.04
199.	Century 25's	100	15.1	1.11
200.	MARLBORO MEN.	KFM	15.2	0.99
201.	Kool (Box)	LFM	15.2	1.03
202.	MARLBORO (BOX)	100	15.3	1.12
203.	Raleigh	100	15.5	0.96
204.	Doral Full Flavor	KF	15.6	1.16
205.	Pall Mall	100	15.6	1.17
206.	Max	120	15.6	1.20
207.	Max Men.	120M	15.6	1.22
208.	Malibu Menthol	KFM	15.7	1.24
209.	Newport (Box)	LFM	15.8	1.12
210.	P.M. INTL (BOX)	100	15.8	1.14
211.	Magna	KF	15.8	1.18
212.	Doral Full Flavor	100	15.8	1.20
213.	Malibu	KF	15.8	1.22
214.	MARLBORO	KF	15.9	1.07
215.	BENSON & HEDGES MEN.	100M	15.9	1.12
216.	MARLBORO 25'S	KF	15.9	1.14
217.	Camel (Box)	LF	15.9	1.14
218.	ALPINE	KFM	16.0	0.97
219.	Newport 25's	KFM	16.0	1.16
220.	P.M. INTL MEN. (BOX)	100M	16.0	1.17
221.	Kool	100M	16.2	1.13
222.	BENSON & HEDGES MEN.(BOX)	100M	16.2	1.14
223.	BENSON & HEDGES (BOX)	100	16.2	1.15
224.	Kool	KFM	16.3	1.05
225.	MARLBORO (BOX)	LF	16.3	1.10
226.	Winston (Box)	LF	16.3	1.12
227.	Malibu 100	100	16.3	1.24
228.	CAMBRIDGE FULL FLAVOR	KF	16.4	1.08
229.	BENSON & HEDGES	100	16.4	1.14
230.	CAMBRIDGE FULL FLAVOR	100	16.5	1.08
231.	MARLBORO	100	16.5	1.16
232.	American Filters	KF	16.5	1.28
233.	Salem	100M	16.6	1.21
234.	Old Gold	KF	16.6	1.22
235.	Doral Full Flavor Men.	100M	16.6	1.25
236.	Chesterfield	RNF	16.7	1.07
237.	Viceroy	KF	16.7	1.20
238.	American Filters	100	16.8	1.27
239.	More	120	16.8	1.28
240.	Newport (Box)	100M	17.1	1.27
241.	Tall Men.	120M	17.1	1.50
242.	Richland 25's	100	17.2	1.28
243.	Winston	100	17.3	1.15
244.	Salem	KFM	17.3	1.27
245.	Viceroy	100	17.4	1.20
246.	Doral Full Flavor Men.	KFM	17.4	1.24
247.	Richland 25's	KF	17.4	1.27
248.	Newport 25's	100M	17.5	1.32
249.	Tall	120	17.6	1.47
250.	Spring	100M	17.7	1.34
251.	Newport	KFM	18.0	1.33
252.	Old Gold	100	18.0	1.41
253.	More Men.	120M	18.1	1.47
254.	Newport	100M	18.7	1.43
255.	Winston	KF	18.9	1.52
256.	Kool 70 NF	RNFM	20.2	1.30
257.	COMMANDER REGULAR	RNF	20.2	1.34
258.	Pyramid	KNF	20.7	1.24
259.	Chesterfield King	KNF	21.0	1.29
260.	Camel	RNF	21.5	1.51
261.	Raleigh	KNF	22.6	1.33
262.	Old Gold Straights	KNF	22.9	1.62
263.	ENGLISH OVALS (BOX)	KNF	22.9	1.82
264.	PLAYERS (BOX)	RNF	23.1	1.63
265.	Pall Mall	KNF	23.3	1.53
266.	H. Tareyton	KNF	23.3	1.55
267.	Lucky Strike	RNF	23.7	1.52
268.	COMMANDER KING SIZE	KNF	24.8	1.49

85mm PLAIN

2055656173

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 85 MM FILTER CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Now	Carlton	Barclay*	Kent III	True
[1]Sales	0.91	1.77	0.59	1.25	1.53
Smoke					
FTC Tar, mg/cigt.	0.9	1.3	3.1	3.6	4.6
Nicotine, mg/cigt.	0.14	0.14	0.34	0.36	0.41
Puffs/cigt.	6.6	7.2	11.2	7.2	8.3
Filtration Eff., %	76	73	62	62	56
Filler Rod TPM, mg/cigt.	23.9	23.0	33.0	28.6	28.1
CO, mg/cigt.	1.6	2.5	3.2	3.4	4.8
Cigarette					
Total RTD, mm of H_2O	114	110	44	94	58
Static Burn. Time, min.	5.6	5.8	8.0	6.7	6.9
Length, mm	83.8	82.7	83.7	84.1	84.2
Circumference,mm	24.9	25.0	24.9	24.9	24.9
Paper					
Component Type	Cit.	Cit.	Cit.	Cit.	Cit.
Component Percent	0.6	0.7	0.5	2.0	0.7
Permeability, ml/cm² x min.	36	47	22	29	37
Filter					
Type	CA	CA	CA	-	-
Inner	-	-	-	CA	CA
Outer	-	-	-	CA	PL
RTD, mm of H_2O	167	151	108	113	115
Length, mm	26.9	24.9	27.0	24.9	25.0
Weight, g	0.19	0.18	0.20	0.15	0.18
Fiber denier/shape	2.1/Y	2.0/Y	2.4/Y	-	-
Inner	-	-	-	1.8/Y	1.9/Y
Outer	-	-	-	2.9/Y	-
Tipping Paper					
Length, mm	31.0	30.0	32.0	32.0	30.0
Tipping Paper Color	White	White	Cork	White	White
Ventilation, %	75	75	84	60	64
Filler					
Total alkaloids, % (DWB)	2.34	2.35	2.00	2.41	2.20
Total red. sugars, % (DWB)	5.8	5.3	6.7	5.6	5.5
Reconstituted Tob., %	15	20	15	15	20
Expanded Stems, %	None	None	7	None	None
Expanded Tob., %	51	46	11	25	14
Wt. of Tob., g (12.5% OV)	0.472	0.524	0.672	0.586	0.664
Rod Length, mm	57.0	57.7	56.7	59.2	59.2
Rod Density, g/cc	0.168	0.182	0.240	0.202	0.228

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.
*These products were smoked using the new Coresta holder designed for channel ventilated cigarettes.

2055656174

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 85 MM FILTER CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Merit Ultra Lights (Box)	Merit Ultra Lights	Vantage Ultra Lights	Winston Ultra Lights	
0.69	3.13	1.99	1.25	[1]Sales
				Smoke
5.0	5.1	5.2	6.4	FTC Tar, mg/cigt.
0.44	0.45	0.45	0.58	Nicotine, mg/cigt.
7.9	8.1	(7.9)	8.2	Puffs/cigt.
63	63	62	61	Filtration Eff., %
27.7	28.7	27.9	32.4	Filler Rod TPM, mg/cigt.
5.4	5.2	6.9	8.1	CO, mg/cigt.
				Cigarette
108	104	113	114	Total RTD, mm of H_2O
7.9	7.5	(7.5)	7.7	Static Burn. Time, min.
82.8	83.9	83.9	83.6	Length, mm
24.9	24.9	24.9	24.9	Circumference,mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.5	0.5	(0.5)	0.5	Component Percent
32	43	28	25	Permeability, ml/cm² x min.
				Filter
CA	CA	CA	CA	Type
-	-	-	-	Inner
-	-	-	-	Outer
127	127	131	124	RTD, mm of H_2O
26.7	26.9	26.9	26.9	Length, mm
0.18	0.18	0.19	0.19	Weight, g
3.2/Y	3.0/Y	2.6/Y	2.4/Y	Fiber denier/shape
-	-	-	-	Inner
-	-	-	-	Outer
				Tipping Paper
32.0	32.0	31.0	31.0	Length, mm
Cork	Cork	White	Cork	Tipping Paper Color
53	53	51	47	Ventilation, %
				Filler
2.04	2.05	2.24	2.24	Total alkaloids, % (DWB)
5.8	6.3	6.9	6.6	Total red. sugars, % (DWB)
22	22	25	25	Reconstituted Tob., %
None	None	None	None	Expanded Stems, %
21	21	(16)	16	Expanded Tob., %
0.594	0.608	0.602	0.631	Wt. of Tob., g (12.5% OV)
56.1	57.1	57.0	56.7	Rod Length, mm
0.215	0.215	0.214	0.226	Rod Density, g/cc

2055656175

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Merit	Merit (Box)	Kent Golden Lights
[1]Sales	4.21	1.30	1.20
Smoke			
FTC Tar, mg/cigt.	7.7	8.1	8.2
Nicotine, mg/cigt.	0.58	0.62	0.68
Puffs/cigt.	7.5	7.7	7.1
Filtration Eff., %	61	60	55
Filler Rod TPM, mg/cigt.	30.0	28.9	29.4
CO, mg/cigt.	8.7	8.4	9.4
Cigarette			
Total RTD, mm of H_2O	115	123	131
Static Burn. Time, min.	7.4	7.6	7.1
Length, mm	85.0	82.8	83.8
Circumference, mm	25.0	25.0	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.6	0.6	2.0
Permeability, ml/cm^2 x min.	46	46	30
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	110	115	112
Length, mm	26.8	26.9	24.9
Weight, g	0.17	0.17	0.14
Fiber denier/shape	2.7/Y	2.5/Y	3.1/Y
Tipping Paper			
Length, mm	32.0	32.0	32.0
Tipping Paper Color	Cork	Cork	White
Ventilation, %	34	32	30
Filler			
Total alkaloids, % (DWB)	1.89	1.95	2.34
Total red. sugars, % (DWB)	7.0	6.9	8.1
Reconstituted Tob., %	22	22	22
Expanded Stems, %	3	3	None
Expanded Tob., %	12	12	11
Wt. of Tob., g (12.5% OV)	0.668	0.658	0.669
Rod Length, mm	57.3	56.0	58.9
Rod Density, g/cc	0.236	0.237	0.230

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656176

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Vantage	Parliament Lights	Winston Lights	
4.88	0.85	8.60	[1]Sales
			Smoke
9.0	9.6	10.7	FTC Tar, mg/cigt.
0.67	0.72	0.77	Nicotine, mg/cigt.
7.8	7.9	7.7	Puffs/cigt.
60	56	56	Filtration Eff., %
28.7	28.8	31.6	Filler Rod TPM, mg/cigt.
10.6	9.1	10.7	CO, mg/cigt.
			Cigarette
132	118	120	Total RTD, mm of H_2O
7.4	7.3	7.8	Static Burn. Time, min.
84.1	84.0	83.7	Length, mm
25.1	24.8	24.9	Circumference,mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.9	1.9	0.4	Component Percent
(26)	45	34	Permeability, ml/cm^2 x min.
			Filter
CA	CA	CA	Type
113	116	96	RTD, mm of H_2O
25.1	25.0	26.9	Length, mm
0.29	0.13	0.17	Weight, g
1.6/R	2.5/Y	2.8/Y	Fiber denier/shape
			Tipping Paper
30.0	30.0	31.0	Length, mm
Cork	White	Cork	Tipping Paper Color
29	35	18	Ventilation, %
			Filler
1.95	2.02	1.94	Total alkaloids, % (DWB)
6.8	7.0	6.9	Total red. sugars, % (DWB)
25	22	25	Reconstituted Tob., %
None	3	None	Expanded Stems, %
(12)	12	12	Expanded Tob., %
0.658	0.693	0.624	Wt. of Tob., g (12.5% OV)
59.1	59.0	56.8	Rod Length, mm
0.223	0.240	0.223	Rod Density, g/cc

2055656177

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Marlboro Lights (Box)	Marlboro Lights	Raleigh Lights
[1]Sales	18.85	21.27	0.18
Smoke			
FTC Tar, mg/cigt.	11.0	11.0	11.4
Nicotine, mg/cigt.	0.78	0.80	0.89
Puffs/cigt.	8.1	8.3	8.3
Filtration Eff., %	55	55	57
Filler Rod TPM, mg/cigt.	31.1	31.8	29.6
CO, mg/cigt.	11.2	11.4	11.8
Cigarette			
Total RTD, mm of H_2O	121	124	131
Static Burn. Time, min.	8.5	8.1	7.8
Length, mm	82.7	83.8	84.2
Circumference,mm	24.9	24.9	25.0
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.4	0.6	0.9
Permeability, ml/cm^2 x min.	29	37	31
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	97	99	103
Length, mm	26.9	26.8	26.9
Weight, g	0.17	0.17	0.17
Fiber denier/shape	3.0/Y	3.0/Y	3.0/Y
Tipping Paper Length, mm	31.0	31.0	32.0
Tipping Paper Color	White	White	Cork
Ventilation, %	22	23	21
Filler			
Total alkaloids, % (DWB)	1.92	1.90	2.10
Total red. sugars, % (DWB)	7.8	7.5	7.1
Reconstituted Tob., %	22	22	16
Expanded Stems, %	3	3	5
Expanded Tob., %	12	12	None
Wt. of Tob., g (12.5% OV)	0.661	0.678	0.722
Rod Length, mm	55.9	57.1	57.3
Rod Density, g/cc	0.240	0.240	0.254

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656178

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Camel Lights	L & M	Kent	
5.10	1.01	2.44	[1]Sales
			Smoke
11.7	12.7	12.9	FTC Tar, mg/cigt.
0.83	0.94	0.88	Nicotine, mg/cigt.
7.4	7.8	8.4	Puffs/cigt.
56	46	51	Filtration Eff., %
29.5	27.6	28.5	Filler Rod TPM, mg/cigt.
12.3	11.7	13.0	CO, mg/cigt.
			Cigarette
113	117	132	Total RTD, mm of H_2O
8.1	7.6	7.2	Static Burn. Time, min.
83.9	83.7	83.9	Length, mm
24.9	24.8	24.9	Circumference, mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.5	0.5	0.8	Component Percent
38	168*	38	Permeability, ml/cm^2 x min.
			Filter
CA	CA	CA	Type
83	65	86	RTD, mm of H_2O
27.0	24.9	20.8	Length, mm
0.16	0.14	0.13	Weight, g
2.4/Y	3.7/Y	3.0/Y	Fiber denier/shape
			Tipping Paper
31.0	30.0	25.0	Length, mm
Cork	White	White	Tipping Paper Color
15	None	18	Ventilation, %
			Filler
1.95	1.91	1.92	Total alkaloids, % (DWB)
6.7	7.6	7.1	Total red. sugars, % (DWB)
25	15	22	Reconstituted Tob., %
None	5	None	Expanded Stems, %
12	23	11	Expanded Tob., %
0.640	0.626	0.746	Wt. of Tob., g (12.5% OV)
56.9	58.8	63.1	Rod Length, mm
0.228	0.218	0.239	Rod Density, g/cc

*These cigarette papers are perforated.

11.7 mg/mm

2055956179

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Lucky Strike	Raleigh	Camel
[1]Sales	0.24	0.95	5.05
Smoke			
FTC Tar, mg/cigt.	13.4	14.7	14.8
Nicotine, mg/cigt.	1.03	0.91	1.04
Puffs/cigt.	8.0	7.4	8.4
Filtration Eff., %	49	46	46
Filler Rod TPM, mg/cigt.	30.4	27.8	29.0
CO, mg/cigt.	13.0	13.3	13.0
Cigarette			
Total RTD, mm of H_2O	115	112	103
Static Burn. Time, min.	8.1	7.2	7.5
Length, mm	82.8	83.7	83.9
Circumference, mm	25.0	24.9	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.7	0.4	0.8
Permeability, ml/cm^2 x min.	26	41	38
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	74	65	66
Length, mm	25.0	20.9	21.0
Weight, g	0.17	0.12	0.13
Fiber denier/shape	2.8/Y	2.8/Y	3.0/Y
Tipping Paper Length, mm	30.0	26.0	25.0
Tipping Paper Color	Cork	Cork	Cork
Ventilation, %	12	None	15
Filler			
Total alkaloids, % (DWB)	1.99	1.94	1.92
Total red. sugars, % (DWB)	8.0	7.1	8.2
Reconstituted Tob., %	20	11	25
Expanded Stems, %	None	14	None
Expanded Tob., %	12	12	12
Wt. of Tob., g (12.5% OV)	0.711	0.694	0.720
Rod Length, mm	57.8	62.8	63.0
Rod Density, g/cc	0.248	0.224	0.231

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656180

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FULL FLAVORED 85 MM FILTER CIGARETTES
(16 MG TAR OR MORE)
(Brands Ranked by FTC Tar, left to right)

	Marlboro	Old Gold	Winston
[1]Sales	27.14	0.55	18.70
Smoke			
FTC Tar, mg/cigt.	15.9	16.6	18.9
Nicotine, mg/cigt.	1.07	1.22	1.52
Puffs/cigt.	8.9	7.9	10.1
Filtration Eff., %	45	46	46
Filler Rod TPM, mg/cigt.	32.0	30.5	36.9
CO, mg/cigt.	14.2	16.4	14.9
Cigarette			
Total RTD, mm of H_2O	112	119	101
Static Burn. Time, min.	8.0	7.4	9.1
Length, mm	84.0	83.8	83.8
Circumference, mm	25.0	25.0	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.5	0.7	0.5
Permeability, ml/cm² x min.	46	19	25
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	69	64	66
Length, mm	21.0	20.9	20.9
Weight, g	0.12	0.12	0.13
Fiber denier/shape	3.2/Y	3.0/Y	3.1/Y
Tipping Paper			
Length, mm	25.0	26.0	25.0
Tipping Paper Color	Cork	Cork	Cork
Ventilation, %	12	None	18
Filler			
Total alkaloids, % (DWB)	1.90	2.36	2.39
Total red. sugars, % (DWB)	7.5	7.6	6.7
Reconstituted Tob., %	22	22	25
Expanded Stems, %	3	None	None
Expanded Tob., %	12	11	7
Wt. of Tob., g (12.5% OV)	0.742	0.720	0.760
Rod Length, mm	63.1	62.9	62.9
Rod Density, g/cc	0.238	0.230	0.245

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

85mm MENTHOL

2055656181

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 85 MM FILTER MENTHOL CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Now	Carlton	True
[1]Sales	0.31	0.53	0.67
Smoke			
FTC Tar, mg/cigt.	1.0	1.2	4.3
Nicotine, mg/cigt.	0.12	0.12	0.39
Puffs/cigt.	6.8	7.1	8.3
Filtration Eff., %	76	74	58
Filler Rod TPM, mg/cigt.	24.4	21.9	27.7
CO, mg/cigt.	2.0	2.2	5.7
Cigarette			
Total RTD, mm of H_2O	112	114	58
Static Burn. Time, min.	5.7	5.6	6.9
Length, mm	84.0	82.6	84.2
Circumference, mm	25.0	25.0	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.6	0.8	0.7
Permeability, ml/cm² x min.	37	43	39
Filter			
Type	CA	CA	-
Inner	-	-	CA
Outer	-	-	PL
RTD, mm of H_2O	164	156	112
Length, mm	26.9	24.6	25.0
Weight, g	0.20	0.18	0.18
Fiber denier/shape	1.9/Y	1.6/Y	-
Inner	-	-	1.8/Y
Outer	-	-	-
Tipping Paper			
Length, mm	31.0	30.0	30.0
Tipping Paper Color	White	White	White
Ventilation, %	76	75	64
Filler			
Total alkaloids, % (DWB)	2.41	2.35	2.16
Total red. sugars, % (DWB)	5.7	4.8	5.3
Reconstituted Tob., %	15	20	20
Expanded Stems, %	None	None	None
Expanded Tob., %	51	46	14
Wt. of Tob., g (12.5% OV)	0.474	0.533	0.664
Rod Length, mm	57.1	58.0	59.2
Rod Density, g/cc	0.168	0.185	0.227
Menthol, mg/cigt.			
Smoke	0.19	0.21	0.20
Filler	4.1	5.2	2.5
Filter	3.9	2.5	1.0

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656182

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 85 MM FILTER MENTHOL CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Salem Ultra Lights	Merit Ultra Lights	Kool Ultra*	
1.65	0.85	0.35	[1]Sales
			Smoke
5.0	5.2	5.3	FTC Tar, mg/cigt.
0.45	0.43	0.41	Nicotine, mg/cigt.
7.4	8.0	8.2	Puffs/cigt.
63	63	62	Filtration Eff., %
27.5	29.3	26.5	Filler Rod TPM, mg/cigt.
6.7	5.8	2.5	CO, mg/cigt.
			Cigarette
118	102	34	Total RTD, mm of H_2O
7.0	7.9	7.2	Static Burn. Time, min.
84.1	83.8	83.9	Length, mm
24.9	24.9	24.9	Circumference, mm
			Paper
Cit.	Cit.	Cit.	Component Type
1.5	0.6	0.9	Component Percent
24	41	45	Permeability, ml/cm² x min.
			Filter
CA	CA	CA	Type
-	-	-	Inner
-	-	-	Outer
129	122	88	RTD, mm of H_2O
26.9	27.0	26.9	Length, mm
0.19	0.18	0.19	Weight, g
2.6/Y	2.8/Y	4.0/Y	Fiber denier/shape
-	-	-	Inner
-	-	-	Outer
			Tipping Paper
31.0	32.0	32.0	Length, mm
White	Cork	Cork	Tipping Paper Color
52	57	74	Ventilation, %
			Filler
2.15	2.04	2.12	Total alkaloids, % (DWB)
5.7	6.7	5.5	Total red. sugars, % (DWB)
25	22	13	Reconstituted Tob., %
None	None	10	Expanded Stems, %
25	21	11	Expanded Tob., %
0.601	0.611	0.646	Wt. of Tob., g (12.5% OV)
57.2	56.8	57.0	Rod Length, mm
0.212	0.218	0.230	Rod Density, g/cc
			Menthol, mg/cigt.
0.35	0.42	0.23	Smoke
3.0	3.3	2.0	Filler
1.3	2.1	1.4	Filter

*These products were smoked using the new Coresta holder designed for channel ventilated cigarettes.

2055656183

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Kool Lights	Merit	Newport Lights
[1]Sales	0.60	0.65	1.17
Smoke			
FTC Tar, mg/cigt.	8.0	8.2	8.7
Nicotine, mg/cigt.	0.65	0.62	0.71
Puffs/cigt.	7.6	8.4	6.8
Filtration Eff., %	56	61	54
Filler Rod TPM, mg/cigt.	27.7	30.1	29.5
CO, mg/cigt.	7.7	8.9	10.1
Cigarette			
Total RTD, mm of H_2O	119	124	141
Static Burn. Time, min.	7.4	7.7	7.1
Length, mm	83.8	84.0	84.2
Circumference, mm	24.9	24.9	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.3	0.5	2.0
Permeability, ml/cm^2 x min.	42	45	30
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	102	121	115
Length, mm	27.0	27.0	24.9
Weight, g	0.17	0.17	0.16
Fiber denier/shape	2.5/Y	2.6/Y	2.9/Y
Tipping Paper Length, mm	32.0	32.0	32.0
Tipping Paper Color	Cork	Cork	Cork
Ventilation, %	36	36	24
Filler			
Total alkaloids, % (DWB)	2.17	2.00	2.29
Total red. sugars, % (DWB)	5.9	6.8	8.2
Reconstituted Tob., %	13	22	22
Expanded Stems, %	10	3	None
Expanded Tob., %	11	12	11
Wt. of Tob., g (12.5% OV)	0.647	0.669	0.677
Rod Length, mm	56.8	57.0	59.2
Rod Density, g/cc	0.232	0.238	0.232
Menthol, mg/cigt.			
Smoke	0.32	0.49	0.32
Filler	2.1	2.9	2.2
Filter	1.2	1.9	1.0

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656184

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Vantage	Marlboro Lights (Box)	Belair	
0.84	0.69	0.81	[1]Sales
			Smoke
9.9	9.9	10.5	FTC Tar, mg/cigt.
0.72	0.75	0.77	Nicotine, mg/cigt.
7.9	8.0	6.9	Puffs/cigt.
58	53	49	Filtration Eff., %
30.0	26.9	27.6	Filler Rod TPM, mg/cigt.
10.8	10.2	9.5	CO, mg/cigt.
			Cigarette
125	111	110	Total RTD, mm of H_2O
7.7	7.3	7.0	Static Burn. Time, min.
83.8	83.0	83.6	Length, mm
25.0	25.0	25.0	Circumference,mm
			Paper
Cit.	Cit.	Cit.	Component Type
1.6	0.5	0.3	Component Percent
24	34	42	Permeability, ml/cm^2 x min.
			Filter
CA	CA	CA	Type
107	90	76	RTD, mm of H_2O
25.1	27.1	26.8	Length, mm
0.29	0.17	0.16	Weight, g
1.5/R	3.9/Y	4.0/Y	Fiber denier/shape
			Tipping Paper
30.0	31.0	32.0	Length, mm
Cork	White	White	Tipping Paper Color
29	28	21	Ventilation, %
			Filler
1.94	2.10	2.14	Total alkaloids, % (DWB)
7.3	8.1	5.8	Total red. sugars, % (DWB)
25	22	11	Reconstituted Tob., %
None	None	14	Expanded Stems, %
12	15	12	Expanded Tob., %
0.679	0.646	0.633	Wt. of Tob., g (12.5% OV)
58.7	55.9	56.7	Rod Length, mm
0.232	0.233	0.224	Rod Density, g/cc
			Menthol, mg/cigt.
0.38	0.53	0.30	Smoke
2.8	2.5	1.5	Filler
1.6	1.7	0.8	Filter

2055656185

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 85 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Salem Lights	Kool Milds (Box)	Kool Milds	Marlboro
[1]Sales	7.43	0.61	3.43	1.23
Smoke				
FTC Tar, mg/cigt.	10.6	11.3	11.7	15.2
Nicotine, mg/cigt.	0.74	0.88	0.88	0.99
Puffs/cigt.	7.8	7.7	7.5	7.8
Filtration Eff., %	57	49	50	44
Filler Rod TPM, mg/cigt.	31.1	27.9	30.3	27.7
CO, mg/cigt.	11.4	10.5	11.1	15.1
Cigarette				
Total RTD, mm of H_2O	135	116	118	116
Static Burn. Time, min.	7.7	7.2	7.7	7.3
Length, mm	83.9	79.9	83.8	83.9
Circumference, mm	24.9	24.9	24.9	24.9
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.9	0.5	0.7	1.6
Permeability, ml/cm^2 x min.	37	23	24	45
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	110	76	79	66
Length, mm	27.0	18.9	26.9	21.0
Weight, g	0.18	0.12	0.15	0.13
Fiber denier/shape	3.4/Y	3.0/Y	3.3/Y	3.7/Y
Tipping Paper Length, mm	31.0	26.0	32.0	25.0
Tipping Paper Color	White	Cork	Cork	Cork
Ventilation, %	21	23	18	None
Filler				
Total alkaloids, % (DWB)	1.99	2.31	2.12	2.10
Total red. sugars, % (DWB)	7.5	6.0	5.9	7.8
Reconstituted Tob., %	25	13	13	22
Expanded Stems, %	None	10	10	None
Expanded Tob., %	12	11	11	15
Wt. of Tob., g (12.5% OV)	0.673	0.701	0.669	0.724
Rod Length, mm	56.9	61.0	57.0	62.8
Rod Density, g/cc	0.239	0.234	0.238	0.235
Menthol, mg/cigt.				
Smoke	0.48	0.44	0.47	0.62
Filler	2.6	2.3	2.1	2.3
Filter	1.3	1.2	1.3	1.1

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656186

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FULL FLAVORED 85 MM FILTER MENTHOL CIGARETTES
(16 MG TAR OR MORE)
(Brands Ranked by FTC Tar, left to right)

	Kool	Salem	Newport
[1]Sales	12.37	7.43	9.08
Smoke			
FTC Tar, mg/cigt.	16.3	17.3	18.0
Nicotine, mg/cigt.	1.05	1.27	1.33
Puffs/cigt.	7.2	8.2	8.3
Filtration Eff., %	43	44	44
Filler Rod TPM, mg/cigt.	28.4	30.2	30.5
CO, mg/cigt.	15.1	16.7	16.7
Cigarette			
Total RTD, mm of H_2O	116	112	120
Static Burn. Time, min.	6.8	7.5	7.4
Length, mm	83.9	83.8	83.9
Circumference, mm	24.9	25.0	24.8
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.8	0.5	0.7
Permeability, ml/cm^2 x min.	26	23	19
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	57	65	64
Length, mm	20.9	20.9	20.9
Weight, g	0.12	0.13	0.12
Fiber denier/shape	4.1/Y	2.7/Y	3.0/Y
Tipping Paper			
Length, mm	26.0	25.0	25.0
Tipping Paper Color	Cork	White	Cork
Ventilation, %	None	None	None
Filler			
Total alkaloids, % (DWB)	2.13	2.29	2.33
Total red. sugars, % (DWB)	7.4	6.5	8.4
Reconstituted Tob., %	13	25	22
Expanded Stems, %	10	None	None
Expanded Tob., %	11	12	11
Wt. of Tob., g (12.5% OV)	0.705	0.714	0.718
Rod Length, mm	63.0	63.0	63.1
Rod Density, g/cc	0.226	0.228	0.232
Menthol, mg/cigt.			
Smoke	0.56	0.65	0.49
Filler	2.1	2.3	1.9
Filter	0.9	0.8	0.7

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

100-120mm
PLAIN

2055656187

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 100 MM FILTER CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Carlton (Box)	Carlton	Now
[1]Sales	1.41	2.56	2.50
Smoke			
FTC Tar, mg/cigt.	1.3	2.4	2.4
Nicotine, mg/cigt.	0.14	0.24	0.24
Puffs/cigt.	8.8	8.6	7.8
Filtration Eff., %	68	65	70
Filler Rod TPM, mg/cigt.	26.1	23.7	24.6
CO, mg/cigt.	2.0	2.8	3.1
Cigarette			
Total RTD, mm of H_2O	84	92	96
Static Burn. Time, min.	5.6	5.7	5.6
Length, mm	98.7	99.6	98.8
Circumference, mm	24.5	24.5	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.9	1.6	1.6
Permeability, ml/cm² x min.	23	24	24
Filter			
Type	CA	CA	CA
Inner	-	-	-
Outer	-	-	-
RTD, mm of H_2O	126	124	132
Length, mm	26.8	(30.9)	30.8
Weight, g	0.17	(0.19)	0.21
Fiber denier/shape	3.2/I	2.5/Y	2.5/Y
Inner	-	-	-
Outer	-	-	-
Tipping Paper			
Length, mm	35.0	35.0	35.0
Tipping Paper Color	White	White	White
Ventilation, %	81	74	69
Filler			
Total alkaloids, % (DWB)	2.33	2.33	2.38
Total red. sugars, % (DWB)	6.0	6.6	6.3
Reconstituted Tob., %	20	20	15
Expanded Stems, %	None	None	None
Expanded Tob., %	46	46	51
Wt. of Tob., g (12.5% OV)	0.632	(0.619)	0.575
Rod Length, mm	71.9	(68.7)	68.0
Rod Density, g/cc	0.184	0.189	0.171

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656188

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 100 MM FILTER CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Winston Ultra Lights	Kent III	Vantage Ultra Lights	
1.68	1.43	2.19	[1]Sales
			Smoke
4.5	4.7	5.1	FTC Tar, mg/cigt.
0.43	0.44	0.46	Nicotine, mg/cigt.
9.8	8.7	(10.2)	Puffs/cigt.
66	67	68	Filtration Eff., %
26.0	28.7	26.5	Filler Rod TPM, mg/cigt.
6.3	5.8	7.4	CO, mg/cigt.
			Cigarette
111	120	124	Total RTD, mm of H_2O
6.8	6.0	(7.8)	Static Burn. Time, min.
98.7	99.2	98.9	Length, mm
24.9	24.9	24.9	Circumference, mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.6	1.9	(0.5)	Component Percent
38	30	24	Permeability, ml/cm^2 x min.
			Filter
CA	-	CA	Type
-	CA	-	Inner
-	CA	-	Outer
150	136	152	RTD, mm of H_2O
30.8	27.0	30.9	Length, mm
0.22	0.16	0.22	Weight, g
2.9/Y	-	2.3/Y	Fiber denier/shape
-	1.8/Y	-	Inner
-	3.0/Y	-	Outer
			Tipping Paper
35.0	34.0	35.0	Length, mm
Cork	White	White	Tipping Paper Color
59	53	55	Ventilation, %
			Filler
2.18	2.43	2.17	Total alkaloids, % (DWB)
7.0	6.6	7.2	Total red. sugars, % (DWB)
25	15	25	Reconstituted Tob., %
None	None	None	Expanded Stems, %
16	25	(16)	Expanded Tob., %
0.716	0.722	(0.756)	Wt. of Tob., g (12.5% OV)
68.0	72.2	68.0	Rod Length, mm
0.214	0.203	(0.226)	Rod Density, g/cc

2055656189

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 100 MM FILTER CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	B & H DeLuxe Ultra Lights (Box)	Barclay*	Merit Ultra Lights (Box)	Merit Ultra Lights
[1]Sales	3.10	0.41	0.48	2.44
Smoke				
FTC Tar, mg/cigt.	5.3	5.3	5.8	5.8
Nicotine, mg/cigt.	0.45	0.47	0.48	0.50
Puffs/cigt.	9.3	12.3	8.9	9.8
Filtration Eff., %	61	58	63	66
Filler Rod TPM, mg/cigt.	27.3	33.7	27.3	30.0
CO, mg/cigt.	6.0	3.5	6.8	6.6
Cigarette				
Total RTD, mm of H_2O	107	70	111	112
Static Burn. Time, min.	6.7	8.0	6.4	7.4
Length, mm	98.6	99.0	98.3	99.5
Circumference, mm	24.0	24.9	24.1	24.9
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	1.6	0.6	2.0	0.5
Permeability, ml/cm^2 x min.	44	24	44	27
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	129	103	128	135
Length, mm	31.5	27.0	31.5	31.4
Weight, g	0.18	0.20	0.18	0.20
Fiber denier/shape	2.8/Y	3.8/Y	3.2/Y	3.0/Y
Tipping Paper				
Length, mm	36.0	36.0	36.0	36.0
Tipping Paper Color	White	Cork	Cork	Cork
Ventilation, %	56	75	52	54
Filler				
Total alkaloids, % (DWB)	1.87	2.06	2.05	2.01
Total red. sugars, % (DWB)	7.8	6.2	6.3	5.8
Reconstituted Tob., %	22	15	22	22
Expanded Stems, %	3	7	None	None
Expanded Tob., %	19	11	21	21
Wt. of Tob., g (12.5% OV)	0.705	0.849	0.680	0.721
Rod Length, mm	67.1	72.0	66.8	68.1
Rod Density, g/cc	0.228	0.240	0.221	0.215

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.
*These products were smoked using the new Coresta holder designed for channel ventilated cigarettes.

2055656190

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	True	Vantage	Kent Golden Lights
[1]Sales	1.17	2.41	1.08
Smoke			
FTC Tar, mg/cigt.	6.9	9.0	9.4
Nicotine, mg/cigt.	0.57	0.71	0.81
Puffs/cigt.	9.3	11.0	9.2
Filtration Eff., %	51	59	57
Filler Rod TPM, mg/cigt.	29.9	31.8	29.1
CO, mg/cigt.	7.2	9.6	9.9
Cigarette			
Total RTD, mm of H_2O	70	116	123
Static Burn. Time, min.	6.8	7.7	6.9
Length, mm	99.1	99.2	99.2
Circumference, mm	24.9	25.0	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	2.1	0.5	1.8
Permeability, ml/cm^2 x min.	30	24	30
Filter			
Type	-	CA	CA
Inner	CA	-	-
Outer	PL	-	-
RTD, mm of H_2O	87	120	103
Length, mm	26.8	27.7	26.9
Weight, g	0.17	0.30	0.17
Fiber denier/shape	-	2.4/Y	3.0/Y
Inner	1.8/Y	-	-
Outer	-	-	-
Tipping Paper			
Length, mm	34.0	34.0	34.0
Tipping Paper Color	White	Cork	White
Ventilation, %	56	50	39
Filler			
Total alkaloids, % (DWB)	2.19	1.85	2.37
Total red. sugars, % (DWB)	5.6	7.9	8.7
Reconstituted Tob., %	20	25	22
Expanded Stems, %	None	None	None
Expanded Tob., %	14	12	11
Wt. of Tob., g (12.5% OV)	0.810	0.828	0.808
Rod Length, mm	72.4	71.5	72.4
Rod Density, g/cc	0.226	0.233	0.227

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656191

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Merit	Winston Lights (Box)	Marlboro Lights	B & H Lights
[1]Sales	3.32	0.42	9.45	2.35
Smoke				
FTC Tar, mg/cigt.	9.8	9.8	10.4	10.7
Nicotine, mg/cigt.	0.75	0.78	0.77	0.81
Puffs/cigt.	10.2	10.4	10.1	10.4
Filtration Eff., %	58	60	58	57
Filler Rod TPM, mg/cigt.	28.5	28.2	30.6	31.6
CO, mg/cigt.	10.8	10.2	11.8	10.8
Cigarette				
Total RTD, mm of H_2O	114	126	122	112
Static Burn. Time, min.	7.8	7.7	7.9	8.0
Length, mm	99.4	98.1	99.5	99.4
Circumference, mm	24.9	24.1	24.9	24.9
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.8	0.6	0.6	0.5
Permeability, ml/cm^2 x min.	43	40	33	34
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	104	120	107	107
Length, mm	31.4	31.0	31.3	31.3
Weight, g	0.19	0.19	0.19	0.19
Fiber denier/shape	2.6/Y	3.4/Y	2.8/Y	2.6/Y
Tipping Paper Length, mm	36.0	35.0	36.0	36.0
Tipping Paper Color	Cork	Cork	White	White
Ventilation, %	34	38	32	34
Filler				
Total alkaloids, % (DWB)	1.92	1.91	1.92	1.90
Total red. sugars, % (DWB)	7.1	7.7	7.9	8.0
Reconstituted Tob., %	22	25	22	22
Expanded Stems, %	3	None	3	3
Expanded Tob., %	12	7	12	12
Wt. of Tob., g (12.5% OV)	0.801	0.775	0.807	0.800
Rod Length, mm	68.1	67.1	68.2	68.1
Rod Density, g/cc	0.238	0.250	0.239	0.238

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656192

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Marlboro Lights (Box)	Winston Lights	Camel Lights	B & H Lts. (Box)	
5.86	5.74	1.30	0.26	[1]Sales
				Smoke
10.9	11.1	11.3	11.3	FTC Tar, mg/cigt.
0.83	0.83	0.83	0.88	Nicotine, mg/cigt.
10.2	10.4	10.2	9.2	Puffs/cigt.
59	57	56	53	Filtration Eff., %
30.5	28.9	27.9	28.0	Filler Rod TPM, mg/cigt.
11.6	11.6	11.7	11.5	CO, mg/cigt.
				Cigarette
120	114	114	122	Total RTD, mm of H_2O
7.8	7.9	8.2	7.5	Static Burn. Time, min.
98.6	98.7	98.8	98.6	Length, mm
24.9	24.9	24.9	24.2	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.5	0.5	0.5	1.6	Component Percent
30	39	38	50	Permeability, ml/cm^2 x min.
				Filter
CA	CA	CA	CA	Type
106	108	96	102	RTD, mm of H_2O
31.3	30.8	30.7	31.6	Length, mm
0.19	0.18	0.18	0.19	Weight, g
3.0/Y	3.3/Y	2.6/Y	2.6/Y	Fiber denier/shape
				Tipping Paper
36.0	35.0	35.0	36.0	Length, mm
White	Cork	Cork	White	Tipping Paper Color
30	34	28	26	Ventilation, %
				Filler
1.89	1.84	1.86	1.99	Total alkaloids, % (DWB)
7.6	7.7	7.0	7.2	Total red. sugars, % (DWB)
22	25	25	22	Reconstituted Tob., %
3	None	None	3	Expanded Stems, %
12	7	7	12	Expanded Tob., %
0.793	0.800	0.798	0.739	Wt. of Tob., g (12.5% OV)
67.3	67.9	68.1	67.0	Rod Length, mm
0.239	0.239	0.237	0.237	Rod Density, g/cc

2055656193

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Newport Stripes (Box)	L & M	Raleigh Lights	Kent
[1]Sales	0.38	0.24	0.21	1.71
Smoke				
FTC Tar, mg/cigt.	11.8	11.9	12.8	13.0
Nicotine, mg/cigt.	0.94	0.90	0.97	0.94
Puffs/cigt.	8.7	10.1	9.6	9.4
Filtration Eff., %	55	49	58	50
Filler Rod TPM, mg/cigt.	28.7	25.8	31.2	27.4
CO, mg/cigt.	13.7	11.5	13.6	13.1
Cigarette				
Total RTD, mm of H_2O	149	113	135	122
Static Burn. Time, min.	7.0	7.3	7.6	7.4
Length, mm	99.1	98.9	99.0	98.8
Circumference, mm	24.9	24.8	25.0	24.9
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	1.8	0.4	0.8	0.8
Permeability, ml/cm^2 x min.	30	63	43	36
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	102	82	103	71
Length, mm	26.8	29.6	30.0	26.8
Weight, g	0.16	0.17	0.18	0.16
Fiber denier/shape	3.0/Y	3.6/Y	3.5/Y	4.6/Y
Tipping Paper Length, mm	34.0	35.0	36.0	34.0
Tipping Paper Color	White	White	Cork	White
Ventilation, %	19	32	16	22
Filler				
Total alkaloids, % (DWB)	2.18	1.94	2.01	1.90
Total red. sugars, % (DWB)	5.6	7.2	7.2	7.4
Reconstituted Tob., %	22	15	16	22
Expanded Stems, %	None	5	5	None
Expanded Tob., %	11	23	None	11
Wt. of Tob., g (12.5% OV)	0.840	0.723	0.844	0.851
Rod Length, mm	72.3	69.2	69.0	72.0
Rod Density, g/cc	0.235	0.214	0.247	0.239

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656194

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FULL FLAVORED 100 MM FILTER CIGARETTES
(16 MG TAR OR MORE)
(Brands Ranked by FTC Tar, left to right)

	Raleigh	Pall Mall	B & H
[1]Sales	0.72	1.93	3.82
Smoke			
FTC Tar, mg/cigt.	15.5	15.6	16.4
Nicotine, mg/cigt.	0.96	1.17	1.14
Puffs/cigt.	8.2	10.2	10.4
Filtration Eff., %	47	47	51
Filler Rod TPM, mg/cigt.	25.9	25.7	31.8
CO, mg/cigt.	14.9	14.4	15.4
Cigarette			
Total RTD, mm of H_2O	118	127	117
Static Burn. Time, min.	6.9	7.5	8.2
Length, mm	98.9	99.3	99.4
Circumference,mm	24.9	24.5	25.0
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.2	0.9	0.5
Permeability, ml/cm^2 x min.	40	47	33
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	61	64	76
Length, mm	26.7	26.8	27.4
Weight, g	0.14	0.16	0.16
Fiber denier/shape	3.8/Y	4.2/Y	3.6/Y
Tipping Paper			
Length, mm	32.0	32.0	32.0
Tipping Paper Color	Cork	White	White
Ventilation, %	None	12	14
Filler			
Total alkaloids, % (DWB)	1.98	2.05	1.90
Total red. sugars, % (DWB)	5.7	8.1	7.4
Reconstituted Tob., %	11	20	22
Expanded Stems, %	14	3	3
Expanded Tob., %	12	17	12
Wt. of Tob., g (12.5% OV)	0.794	0.849	0.855
Rod Length, mm	72.2	72.6	72.1
Rod Density, g/cc	0.224	0.244	0.239

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656195

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FULL FLAVORED 100 MM FILTER CIGARETTES
(16 MG TAR OR MORE)
(Brands Ranked by FTC Tar, left to right)

	Marlboro	Winston
[1]Sales	8.04	6.28
Smoke		
FTC Tar, mg/cigt.	16.5	17.3
Nicotine, mg/cigt.	1.16	1.15
Puffs/cigt.	10.6	10.2
Filtration Eff., %	50	51
Filler Rod TPM, mg/cigt.	30.1	30.3
CO, mg/cigt.	15.3	16.8
Cigarette		
Total RTD, mm of H_2O	114	125
Static Burn. Time, min.	8.0	8.0
Length, mm	99.6	99.3
Circumference, mm	24.9	24.9
Paper		
Component Type	Cit.	Cit.
Component Percent	0.5	0.5
Permeability, ml/cm^2 x min.	46	26
Filter		
Type	CA	CA
RTD, mm of H_2O	74	77
Length, mm	27.4	27.4
Weight, g	0.16	0.17
Fiber denier/shape	3.7/Y	3.8/Y
Tipping Paper		
Length, mm	31.5	32.0
Tipping Paper Color	Cork	Cork
Ventilation, %	14	7
Filler		
Total alkaloids, % (DWB)	1.96	1.81
Total red. sugars, % (DWB)	8.2	8.5
Reconstituted Tob., %	22	25
Expanded Stems, %	3	None
Expanded Tob., %	12	12
Wt. of Tob., g (12.5% OV)	0.852	0.823
Rod Length, mm	72.2	71.9
Rod Density, g/cc	0.239	0.232

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656196

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

120 MM FILTER CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Carlton	Virginia Slims Lights (Box)	Saratoga (Box)	More
[1]Sales	0.53	1.66	0.66	1.93
Smoke				
FTC Tar, mg/cigt.	5.9	13.9	14.5	16.8
Nicotine, mg/cigt.	0.55	1.04	1.04	1.28
Puffs/cigt.	11.6	12.8	13.2	12.5
Filtration Eff., %	44	52	51	49
Filler Rod TPM, mg/cigt.	20.7	27.3	28.3	34.8
CO, mg/cigt.	4.2	13.5	14.5	19.8
Cigarette				
Total RTD, mm of H_2O	89	133	139	161
Static Burn. Time, min.	6.2	7.8	7.9	8.3
Length, mm	119.4	119.2	119.2	119.7
Circumference, mm	22.3	23.1	23.1	21.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.9	0.5	0.5	1.4
Color	White	White	White	Brown
Permeability, ml/cm^2 x min.	46	30	27	17
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	87	102	105	117
Length, mm	30.0	31.4	31.5	35.0
Weight, g	0.14	0.16	0.16	0.16
Fiber denier/shape	4.8/Y	3.4/Y	3.0/Y	5.4/Y
Tipping Paper Length, mm	35.0	36.0	36.0	39.0
Tipping Paper Color	White	White	Cork	Brown
Ventilation, %	67	30	31	31
Filler				
Total alkaloids, % (DWB)	2.29	1.92	1.90	2.08
Total red. sugars, % (DWB)	6.1	8.1	8.0	7.2
Reconstituted Tob., %	20	22	22	25
Expanded Stems, %	None	3	3	None
Expanded Tob., %	34	12	12	12
Wt. of Tob., g (12.5% OV)	0.758	0.910	0.912	0.729
Rod Length, mm	89.4	87.9	87.8	84.7
Rod Density, g/cc	0.215	0.244	0.244	0.245

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

100-120mm MENTHOL

2055656197

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ULTRA LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Now	Salem Ultra Lights
[1]Sales	1.26	2.50
Smoke		
FTC Tar, mg/cigt.	2.3	5.1
Nicotine, mg/cigt.	0.23	0.44
Puffs/cigt.	7.8	9.7
Filtration Eff., %	69	68
Filler Rod TPM, mg/cigt.	23.4	29.5
CO, mg/cigt.	2.4	6.9
Cigarette		
Total RTD, mm of H_2O	95	113
Static Burn. Time, min.	5.5	7.3
Length, mm	99.1	99.1
Circumference, mm	25.0	25.0
Paper		
Component Type	Cit.	Cit.
Component Percent	1.5	1.7
Permeability, ml/cm² x min.	24	26
Filter		
Type	CA	CA
RTD, mm of H_2O	134	150
Length, mm	30.9	30.9
Weight, g	0.20	0.22
Fiber denier/shape	2.9/Y	2.8/Y
Tipping Paper		
Length, mm	35.0	35.0
Tipping Paper Color	White	White
Ventilation, %	72	57
Filler		
Total alkaloids, % (DWB)	2.41	2.03
Total red. sugars, % (DWB)	5.7	8.0
Reconstituted Tob., %	15	25
Expanded Stems, %	None	None
Expanded Tob., %	51	12
Wt. of Tob., g (12.5% OV)	0.573	0.762
Rod Length, mm	68.2	68.2
Rod Density, g/cc	0.169	0.224
Menthol, mg/cigt.		
Smoke	0.30	0.34
Filler	4.8	3.8
Filter	3.2	1.6

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656198

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

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DOMESTIC PRODUCTION
WEEKLY SMOKING AND PHYSICAL TEST RESULTS
BAZ1 - BEST BUY NON-FILTER KS SP - STD
STOCKTON STREET

WEEK	TAR	NIC	TPM	MEN	H2O	PUFF	MON	TOT RTD	PLG RTD	VEN	POR	TOB WT.	OV	CIR	FRM	END
TARGETS	23.0			.00			22.2	60	0	0	46	.996	13.00	24.80	.0	
90/10/14	25.6	1.76	32.0	.00	4.6	9.7	21.9	57	0	0	44	1.011	13.18	24.95	3.0	.633
90/10/21	24.5	1.59	29.8	.00	3.8	9.6	22.5	60	0	0	47	.980	12.92	24.92	3.1	.394
90/11/04	25.1	1.60	31.0	.00	4.3	9.9	22.6	59	0	0	43	.977	13.22	24.88	3.0	.845
90/11/11	23.6	1.51	28.4	.00	3.3	9.5	22.1	60	0	0	44	1.003	13.30	24.96	3.0	.480
90/11/25	24.6	1.65	30.4	.00	4.1	9.8	22.7	55	0	0	49	.999	13.16	24.99	3.1	.472
90/12/02	24.4	1.63	29.6	.00	3.6	9.6	21.9	58	0	0	48	.977	13.07	24.87	3.3	.967
90/12/09	23.2	1.56	28.3	.00	3.6	9.5	21.6	61	0	0	44	.983	13.20	24.92	3.1	.558
90/12/16	25.2	1.67	31.1	.00	4.3	10.3	21.8	71	0	0	47	1.027	13.50	24.95	3.1	.691
90/12/23	23.9	1.59	29.4	.00	3.9	9.7	22.2	61	0	0	41	1.015	13.45	24.98	3.1	.502
91/01/20	23.7	1.52	29.1	.00	3.9	9.6	21.8	62	0	0	45	1.000	13.60	24.95	3.2	.545
91/01/27	24.0	1.52	29.6	.00	4.1	9.5	22.2	58	0	0	48	.976	13.62	25.00	3.3	.796
91/02/03	23.0	1.46	28.0	.00	3.5	9.3	21.6	60	0	0	46	1.024	13.90	24.99	3.2	.671
91/02/17	23.2	1.54	28.4	.00	3.6	9.5	21.9	61	0	0	39	.983	13.70	24.91	3.4	.961
91/03/10	23.2	1.51	28.2	.00	3.5	9.4	22.4	62	0	0	45	1.004	13.07	24.93	3.1	.880
91/03/17	25.5	1.65	32.2	.00	5.1	9.7	22.0	59	0	0	50	1.011	13.22	24.96	3.3	.708
91/03/24	22.8	1.45	27.9	.00	3.7	9.4	21.6	55	0	0	44	1.002	13.16	24.92	3.3	.518
91/04/14	24.5	1.54	29.9	.00	3.9	9.8	22.4	57	0	0	45	.963	13.02	24.96	3.5	.796
91/04/28	24.4	1.61	29.9	.00	3.9	9.8	22.8	66	0	0	45	1.008	13.51	24.87	3.4	.865
91/05/19	24.4	1.59	30.1	.00	4.1	10.0	23.1	66	0	0	40	1.030	13.05	24.99	3.2	.993
91/06/02	24.3	1.54	30.1	.00	4.2	9.7	22.5	60	0	0	45	.997	13.46	24.97	3.4	.884
91/06/09	23.6	1.48	28.5	.00	3.5	9.6	21.0	61	0	0	45	1.015	13.44	24.85	3.3	.861
91/06/16	25.6	1.59	31.4	.00	4.2	11.2	22.8	60	0	0	42	1.015	13.45	25.02	3.5	.995
91/06/23	23.5	1.49	28.7	.00	3.7	9.7	22.0	60	0	0	44	.997	13.22	24.95	3.2	.827
91/06/30	23.2	1.46	28.9	.00	4.2	9.5	22.4	59	0	0	49	.995	13.00	25.03	3.1	.983
91/07/14	24.3	1.58	29.9	.00	4.1	9.6	21.5	59	0	0	47	1.003	13.10	24.95	3.1	1.363
91/07/21	23.9	1.49	29.5	.00	4.1	9.6	21.7	63	0	0	46	1.004	12.90	25.17	3.2	1.479
91/07/28	24.9	1.58	30.6	.00	4.2	9.6	22.0	64	0	0	47	1.004	12.94	24.99	3.1	.953
91/08/04	25.1	1.59	30.9	.00	4.3	9.7	21.2	61	0	0	39	1.001	13.20	25.00	3.3	.813
91/08/11	24.5	1.56	30.2	.00	4.2	9.6	21.7	66	0	0	43	.998	13.08	24.89	3.4	.716
91/08/18	25.7	1.66	32.0	.00	4.6	.0	22.2	62	0	0	44	1.036	13.00	24.97	3.0	.736
91/08/25	24.6	1.52	30.0	.00	3.9	9.4	22.1	60	0	0	37	1.040	13.11	25.00	3.1	.977
91/09/01	24.1	1.52	29.5	.00	3.9	9.3	21.7	57	0	0	47	1.008	12.73	25.05	3.1	1.167
91/09/08	25.0	1.63	31.0	.00	4.4	9.6	22.4	60	0	0	43	1.033	12.98	25.12	2.8	1.160
91/09/15	24.4	1.54	30.0	.00	4.0	9.4	22.1	59	0	0	50	1.008	12.75	24.97	3.1	1.247
91/09/22	25.0	1.58	30.4	.00	3.8	9.9	22.0	63	0	0	45	.999	12.94	24.98	3.3	1.004
91/09/29	24.7	1.62	30.8	.00	4.5	9.6	21.8	63	0	0	49	1.013	13.09	25.00	2.9	1.316
91/10/06	25.7	1.59	31.7	.00	4.4	9.4	22.1	57	0	0	41	1.010	13.25	24.92	3.2	1.314
91/10/13	24.8	1.62	30.7	.00	4.3	10.0	22.6	61	0	0	44	1.024	12.72	24.92	3.0	1.138
91/10/20	25.4	1.60	31.3	.00	4.3	10.2	21.9	67	0	0	43	1.006	12.93	24.82	3.1	1.502
91/10/27	25.4	1.60	30.9	.00	3.9	10.3	21.7	61	0	0	45	1.028	13.37	25.00	3.3	1.688
AVERAGE	24.4	1.57	30.0	.00	4.0	9.7	22.1	61	0	0	45	1.005	13.19	24.96	3.2	.910
STD DEV	.82	.07	1.17	.00	.37	.35	.45	3.2	.0	.00	3.0	.018	.27	.06	.15	.31
NUMBER	40	40	40	0	40	39	40	40	0	0	40	40	40	40	40	40

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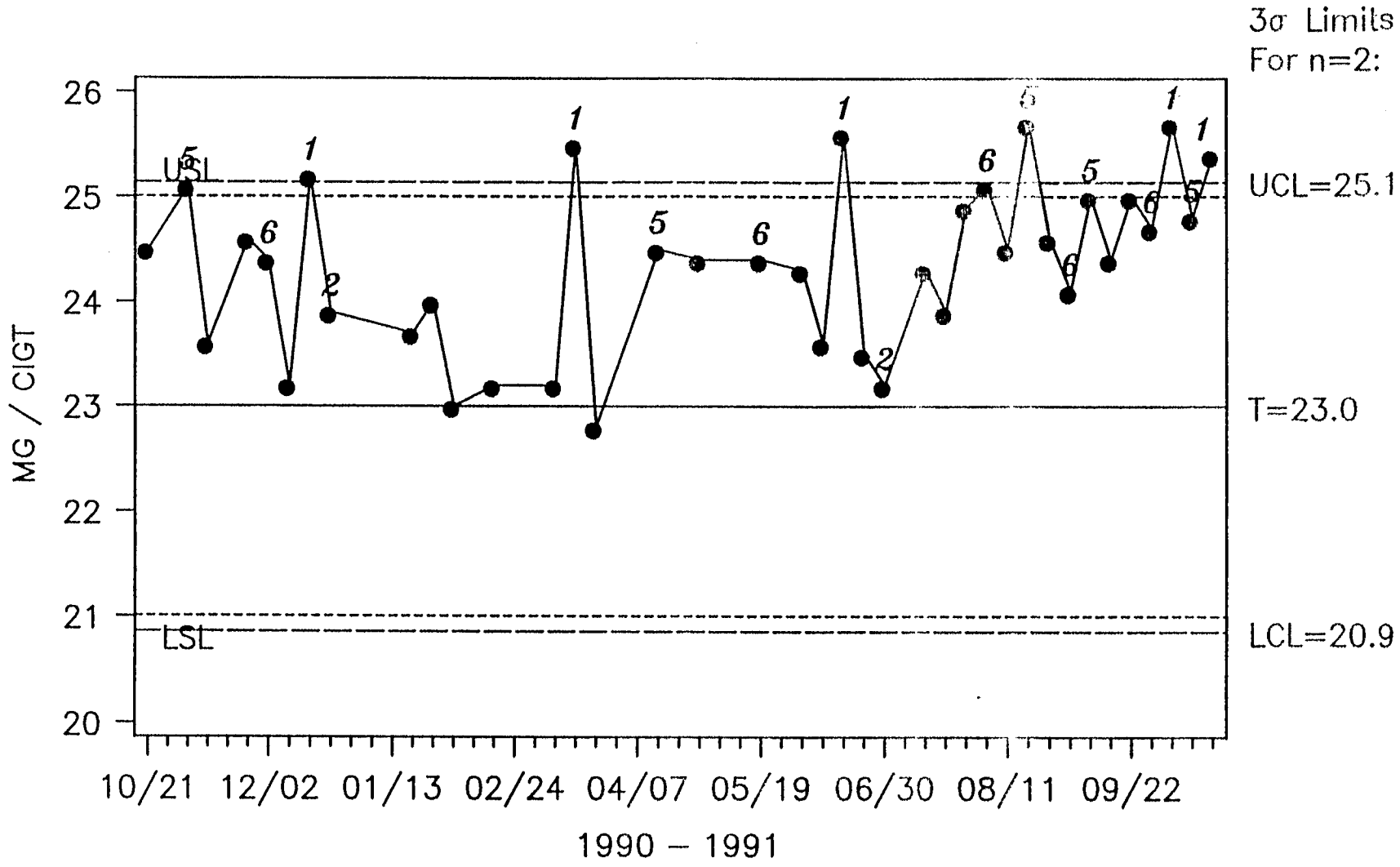
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

No recent change

EXCEPTIONS REPORTING FOR TAR

THROUGH WEEKENDING 10/20/91

STOCKTON ST =BAZ1STD =BEST BUY NON-FILTER KS SP



PERFORMANCE STANDARD = 1990

(P&G)

2055656200

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

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DOMESTIC PRODUCTION
WEEKLY SMOKING AND PHYSICAL TEST RESULTS
BAZ1 - BEST BUY NON-FILTER KS SP - STD
STOCKTON STREET

WEEK	TAR	NIC	TPM	MEN	H2O	PUFF	MON	TOT RTD	PLG RTD	VEN	POR	TOB WT.	OV	CIR	FRM	END
TARGETS	23.0			.00			22.2	60	0	0	46	.996	13.00	24.80	.0	
90/10/14	25.6	1.76	32.0	.00	4.6	9.7	21.9	57	0	0	44	1.011	13.18	24.95	3.0	.633
90/10/21	24.5	1.59	29.8	.00	3.8	9.6	22.5	60	0	0	47	.980	12.92	24.92	3.1	.394
90/11/04	25.1	1.60	31.0	.00	4.3	9.9	22.6	59	0	0	43	.977	13.22	24.88	3.0	.845
90/11/11	23.6	1.51	28.4	.00	3.3	9.5	22.1	60	0	0	44	1.003	13.30	24.96	3.0	.480
90/11/25	24.6	1.65	30.4	.00	4.1	9.8	22.7	55	0	0	49	.999	13.16	24.99	3.1	.472
90/12/02	24.4	1.63	29.6	.00	3.6	9.6	21.9	58	0	0	48	.977	13.07	24.87	3.3	.967
90/12/09	23.2	1.56	28.3	.00	3.6	9.5	21.6	61	0	0	44	.983	13.20	24.92	3.1	.558
90/12/16	25.2	1.67	31.1	.00	4.3	10.3	21.8	71	0	0	47	1.027	13.50	24.95	3.1	.691
90/12/23	23.9	1.59	29.4	.00	3.9	9.7	22.2	61	0	0	41	1.015	13.45	24.98	3.1	.502
91/01/20	23.7	1.52	29.1	.00	3.9	9.6	21.8	62	0	0	45	1.000	13.60	24.95	3.2	.545
91/01/27	24.0	1.52	29.6	.00	4.1	9.5	22.2	58	0	0	48	.976	13.62	25.00	3.3	.796
91/02/03	23.0	1.46	28.0	.00	3.5	9.3	21.6	60	0	0	46	1.024	13.90	24.99	3.2	.671
91/02/17	23.2	1.54	28.4	.00	3.6	9.5	21.9	61	0	0	39	.983	13.70	24.91	3.4	.961
91/03/10	23.2	1.51	28.2	.00	3.5	9.4	22.4	62	0	0	45	1.004	13.07	24.93	3.1	.880
91/03/17	25.5	1.65	32.2	.00	5.1	9.7	22.0	59	0	0	50	1.011	13.22	24.96	3.3	.708
91/03/24	22.8	1.45	27.9	.00	3.7	9.4	21.6	55	0	0	44	1.002	13.16	24.92	3.3	.518
91/04/14	24.5	1.54	29.9	.00	3.9	9.8	22.4	57	0	0	45	.963	13.02	24.96	3.5	.796
91/04/28	24.4	1.61	29.9	.00	3.9	9.8	22.8	66	0	0	45	1.008	13.51	24.87	3.4	.865
91/05/19	24.4	1.59	30.1	.00	4.1	10.0	23.1	66	0	0	40	1.030	13.05	24.99	3.2	.993
91/06/02	24.3	1.54	30.1	.00	4.2	9.7	22.5	60	0	0	45	.997	13.46	24.97	3.4	.884
91/06/09	23.6	1.48	28.5	.00	3.5	9.6	21.0	61	0	0	45	1.015	13.44	24.85	3.3	.861
91/06/16	25.6	1.59	31.4	.00	4.2	11.2	22.8	60	0	0	42	1.015	13.45	25.02	3.5	.995
91/06/23	23.5	1.49	28.7	.00	3.7	9.7	22.0	60	0	0	44	.997	13.22	24.95	3.2	.827
91/06/30	23.2	1.46	28.9	.00	4.2	9.5	22.4	59	0	0	49	.995	13.00	25.03	3.1	.983
91/07/14	24.3	1.58	29.9	.00	4.1	9.6	21.5	59	0	0	47	1.003	13.10	24.95	3.1	1.363
91/07/21	23.9	1.49	29.5	.00	4.1	9.6	21.7	63	0	0	46	1.004	12.90	25.17	3.2	1.479
91/07/28	24.9	1.58	30.6	.00	4.2	9.6	22.0	64	0	0	47	1.004	12.94	24.99	3.1	.953
91/08/04	25.1	1.59	30.9	.00	4.3	9.7	21.2	61	0	0	39	1.001	13.20	25.00	3.3	.813
91/08/11	24.5	1.56	30.2	.00	4.2	9.6	21.7	66	0	0	43	.998	13.08	24.89	3.4	.716
91/08/18	25.7	1.66	32.0	.00	4.6	.0	22.2	62	0	0	44	1.036	13.00	24.97	3.0	.736
91/08/25	24.6	1.52	30.0	.00	3.9	9.4	22.1	60	0	0	37	1.040	13.11	25.00	3.1	.977
91/09/01	24.1	1.52	29.5	.00	3.9	9.3	21.7	57	0	0	47	1.008	12.73	25.05	3.1	1.167
91/09/08	25.0	1.63	31.0	.00	4.4	9.6	22.4	60	0	0	43	1.033	12.98	25.12	2.8	1.160
91/09/15	24.4	1.54	30.0	.00	4.0	9.4	22.1	59	0	0	50	1.008	12.75	24.97	3.1	1.247
91/09/22	25.0	1.58	30.4	.00	3.8	9.9	22.0	63	0	0	45	.999	12.94	24.98	3.3	1.004
91/09/29	24.7	1.62	30.8	.00	4.5	9.6	21.8	63	0	0	49	1.013	13.09	25.00	2.9	1.316
91/10/06	25.7	1.59	31.7	.00	4.4	9.4	22.1	57	0	0	41	1.010	13.25	24.92	3.2	1.314
91/10/13	24.8	1.62	30.7	.00	4.3	10.0	22.6	61	0	0	44	1.024	12.72	24.92	3.0	1.138
91/10/20	25.4	1.60	31.3	.00	4.3	10.2	21.9	67	0	0	43	1.006	12.93	24.82	3.1	1.502
AVERAGE	24.4	1.57	30.0	.00	4.0	9.7	22.1	61	0	0	45	1.005	13.18	24.96	3.2	.890
STD DEV	.81	.07	1.17	.00	.37	.34	.45	3.3	.0	.00	3.1	.017	.27	.07	.15	.29
NUMBER	39	39	39	0	39	38	39	39	0	0	39	39	39	39	39	39

2d Started

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DOMESTIC PRODUCTION
WEEKLY SMOKING AND PHYSICAL TEST RESULTS
0090 - COMMANDER KING SIZE REG NON-F - STD
STOCKTON STREET

WEEK	TAR	NIC	TPM	MEN	H20	PUFF	MON	TOT RTD	PLG RTD	VEN	POR	TOB WT.	OV	CIR	FRM	END
TARGETS	23.0			.00			22.2	60	0	0	46	.996	13.00	24.80	2.9	
90/10/07	23.1	1.51	28.0	.00	3.4	9.3	21.8	60	0	0	42	.992	13.47	24.97	3.4	.920
90/10/28	25.3	1.63	30.7	.00	3.8	9.5	22.5	62	0	0	48	.989	13.13	25.01	3.2	.416
90/11/18	23.6	1.54	28.4	.00	3.3	10.0	21.5	61	0	0	43	.993	12.99	24.83	3.0	.550
91/01/13	23.8	1.52	29.0	.00	3.7	9.7	21.2	66	0	0	51	.986	13.03	24.93	3.0	.679
91/02/10	23.1	1.47	27.8	.00	3.2	9.1	21.8	61	0	0	43	1.000	13.75	24.93	3.2	.705
91/02/17	24.9	1.63	30.7	.00	4.1	10.0	21.9	60	0	0	42	1.012	13.60	24.74	3.0	.816
91/02/24	23.0	1.55	27.9	.00	3.4	9.7	22.6	63	0	0	48	.989	13.51	24.86	3.2	.756
91/03/03	23.5	1.60	28.8	.00	3.7	9.8	21.5	59	0	0	46	.987	13.52	24.89	3.5	1.070
91/03/10	23.1	1.50	27.9	.00	3.3	9.9	22.5	59	0	0	41	.950	13.13	24.86	3.4	.636
91/03/31	23.1	1.50	28.3	.00	3.7	9.6	21.5	66	0	0	45	.997	13.34	24.88	3.2	.753
91/04/07	23.4	1.51	28.6	.00	3.6	9.5	21.5	59	0	0	43	1.005	13.37	24.94	3.3	.722
91/04/14	22.1	1.42	26.8	.00	3.3	9.5	21.6	65	0	0	41	.997	13.37	24.84	3.2	.965
91/04/21	23.5	1.50	28.7	.00	3.7	9.7	22.0	60	0	0	45	1.003	13.61	24.99	3.3	.729
91/05/12	23.3	1.50	28.5	.00	3.7	9.9	22.4	59	0	0	45	.984	13.06	24.95	3.0	.000
AVERAGE	23.5	1.53	28.6	.00	3.6	9.7	21.9	61	0	0	44	.992	13.35	24.90	3.2	.747
STD DEV	.79	.06	1.05	.00	.25	.26	.46	2.5	.0	.00	2.9	.014	.24	.07	.16	.17
NUMBER	14	14	14	0	14	14	14	14	0	0	14	14	14	14	14	13

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DOMESTIC PRODUCTION
WEEKLY SMOKING AND PHYSICAL TEST RESULTS
0380 - ENGLISH OVALS KS NON-FILTER - STD
STOCKTON STREET

WEEK	TAR	NIC	TPM	MEN	H2O	PUFF	MON	TOT RTD	PLG RTD	VEN	POR	TOB WT.	OV	CIR	FRM	END
TARGETS	22.0			.00			22.2	106	0	0	46	1.055	12.60	.00	.0	
90/10/07	23.5	1.90	28.1	.00	2.7	11.1	21.9	110	0	0	43	1.004	12.41	.00	.0	.365
90/11/11	23.0	1.88	27.4	.00	2.5	10.8	21.6	97	0	0	50	1.069	12.35	.00	.0	.207
90/11/18	22.7	1.91	27.1	.00	2.5	10.8	21.5	101	0	0	46	1.040	11.79	.00	.0	.315
91/01/13	22.7	1.80	27.1	.00	2.6	10.9	21.7	101	0	0	50	1.067	12.60	.00	.0	.322
91/01/20	22.4	1.85	27.0	.00	2.7	11.4	21.7	109	0	0	45	1.065	12.47	.00	.0	.295
91/02/03	22.1	1.75	26.5	.00	2.7	10.9	21.6	107	0	0	46	1.029	11.98	.00	.0	.277
91/02/10	23.6	1.92	28.4	.00	2.8	11.3	22.2	103	0	0	45	1.020	11.91	.00	.0	.280
91/03/03	23.4	1.91	28.4	.00	3.1	11.0	22.2	109	0	0	44	1.015	11.95	.00	.0	.286
91/03/10	23.3	1.95	28.1	.00	2.8	11.1	22.3	103	0	0	42	1.043	12.32	.00	.0	.311
91/03/17	23.0	1.87	27.6	.00	2.8	11.3	22.2	93	0	0	47	1.061	12.48	.00	.0	.231
91/03/24	21.4	1.69	25.8	.00	2.7	10.8	21.9	109	0	0	46	1.030	12.18	.00	.0	.197
91/03/31	22.0	1.76	26.4	.00	2.6	11.0	21.5	110	0	0	48	1.021	11.86	.00	.0	.171
91/04/07	23.0	1.83	27.7	.00	2.9	11.0	21.4	106	0	0	42	1.038	11.74	.00	.0	.170
91/04/14	21.8	1.71	26.0	.00	2.5	11.0	22.3	102	0	0	46	1.051	11.86	.00	.0	.203
91/04/21	20.8	1.59	24.9	.00	2.5	11.2	22.2	106	0	0	46	1.037	12.34	.00	.0	.184
91/04/28	20.3	1.59	24.5	.00	2.6	11.0	21.8	110	0	0	48	1.014	12.57	.00	.0	.190
91/05/12	20.5	1.58	24.3	.00	2.2	11.1	22.6	113	0	0	45	1.050	12.14	.00	.0	.221
91/05/19	22.5	1.74	26.9	.00	2.7	11.7	22.5	123	0	0	44	1.070	11.95	.00	.0	.220
91/05/26	22.7	1.78	27.3	.00	2.8	11.4	22.6	111	0	0	45	1.075	12.19	.00	.0	.223
91/07/21	21.7	1.70	26.2	.00	2.8	10.4	22.1	106	0	0	43	1.036	12.19	.00	.0	.230
91/07/28	21.7	1.75	26.0	.00	2.6	11.1	21.9	115	0	0	45	1.052	12.51	.00	.0	.184
91/08/04	22.7	1.85	27.6	.00	3.0	11.2	21.4	101	0	0	45	1.064	12.78	.00	.0	.153
91/08/11	21.7	1.75	26.2	.00	2.7	11.2	22.3	100	0	0	47	1.051	12.75	.00	.0	.193
91/08/18	23.4	1.91	28.5	.00	3.2	11.4	21.9	106	0	0	47	1.090	12.53	.00	.0	.168
91/09/08	22.3	1.69	26.8	.00	2.8	10.3	22.2	103	0	0	43	1.037	12.99	.00	.0	.275
91/09/15	23.4	1.72	28.3	.00	3.2	10.9	21.5	101	0	0	46	1.023	12.46	.00	.0	.267
91/09/22	23.5	1.79	28.3	.00	3.0	10.9	22.3	99	0	0	46	1.055	13.10	.00	.0	.322
91/09/29	22.8	1.90	27.8	.00	3.1	10.6	21.8	105	0	0	43	1.028	12.87	.00	.0	.325
91/10/06	24.1	1.95	29.5	.00	3.5	11.2	22.1	105	0	0	45	1.064	13.20	.00	.0	.307
91/10/13	23.6	1.87	28.4	.00	3.0	11.3	22.7	108	0	0	44	1.095	13.30	.00	.0	.251
AVERAGE	22.5	1.80	27.1	.00	2.8	11.0	22.0	106	0	0	45	1.046	12.39	.00	.0	.245
STD DEV	.96	.11	1.25	.00	.26	.30	.38	5.9	.0	.00	2.1	.023	.43	.00	.00	.06
NUMBER	30	30	30	0	30	30	30	30	0	0	30	30	30	0	0	30

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ULTRA LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(6 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Merit Ultra Lights	B & H DeLuxe Ultra Lights (Box)	
0.60	2.26	[1]Sales
		Smoke
5.4	5.7	FTC Tar, mg/cigt.
0.48	0.45	Nicotine, mg/cigt.
10.1	9.4	Puffs/cigt.
67	63	Filtration Eff., %
29.0	27.8	Filler Rod TPM, mg/cigt.
6.5	7.2	CO, mg/cigt.
		Cigarette
111	114	Total RTD, mm of H_2O
7.6	7.1	Static Burn. Time, min.
99.2	98.5	Length, mm
24.9	24.1	Circumference, mm
		Paper
Cit.	Cit.	Component Type
0.5	1.8	Component Percent
26	44	Permeability, ml/cm^2 x min.
		Filter
CA	CA	Type
138	134	RTD, mm of H_2O
31.4	31.6	Length, mm
0.20	0.19	Weight, g
3.0/Y	3.0/Y	Fiber denier/shape
		Tipping Paper
36.0	36.0	Length, mm
Cork	White	Tipping Paper Color
58	54	Ventilation, %
		Filler
2.12	1.90	Total alkaloids, % (DWB)
5.8	8.1	Total red. sugars, % (DWB)
22	22	Reconstituted Tob., %
None	3	Expanded Stems, %
21	19	Expanded Tob., %
0.734	0.707	Wt. of Tob., g (12.5% OV)
67.8	66.9	Rod Length, mm
0.219	0.228	Rod Density, g/cc
		Menthol, mg/cigt.
0.43	0.43	Smoke
3.9	3.7	Filler
2.5	2.3	Filter

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	True	Kool Lights	Salem Lights
[1]Sales	0.65	0.50	5.52
Smoke			
FTC Tar, mg/cigt.	6.5	8.6	8.8
Nicotine, mg/cigt.	0.57	0.69	0.72
Puffs/cigt.	9.4	9.4	(11.1)
Filtration Eff., %	50	56	59
Filler Rod TPM, mg/cigt.	27.6	29.2	29.4
CO, mg/cigt.	8.2	8.4	9.6
Cigarette			
Total RTD, mm of H_2O	70	122	112
Static Burn. Time, min.	6.4	7.1	7.7
Length, mm	99.1	98.8	98.7
Circumference,mm	25.0	24.9	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.9	0.5	0.5
Permeability, ml/cm² x min.	27	23	(24)
Filter			
Type	-	CA	CA
Inner	CA	-	-
Outer	PL	-	-
RTD, mm of H_2O	86	98	116
Length, mm	26.8	28.8	30.8
Weight, g	0.17	0.17	0.19
Fiber denier/shape	-	3.4/Y	2.9/Y
Inner	1.8/Y	-	-
Outer	-	-	-
Tipping Paper			
Length, mm	34.0	36.0	35.0
Tipping Paper Color	White	Cork	White
Ventilation, %	56	38	(48)
Filler			
Total alkaloids, % (DWB)	2.21	2.14	1.92
Total red. sugars, % (DWB)	5.4	6.1	8.3
Reconstituted Tob., %	20	13	25
Expanded Stems, %	None	10	None
Expanded Tob., %	14	11	(7)
Wt. of Tob., g (12.5% OV)	0.808	0.794	(0.844)
Rod Length, mm	72.3	70.0	67.9
Rod Density, g/cc	0.226	0.230	(0.251)
Menthol, mg/cigt.			
Smoke	0.37	0.33	0.44
Filler	3.3	2.7	3.3
Filter	1.0	1.4	1.5

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656205

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

Vantage	Newport Lights	Kool Ultra*	
0.24	0.32	0.37	[1]Sales
			Smoke
9.1	9.1	9.3	FTC Tar, mg/cigt.
0.69	0.78	0.63	Nicotine, mg/cigt.
9.3	9.4	9.2	Puffs/cigt.
62	52	57	Filtration Eff., %
28.3	28.5	25.3	Filler Rod TPM, mg/cigt.
10.6	10.5	6.8	CO, mg/cigt.
			Cigarette
137	118	57	Total RTD, mm of H_2O
7.2	6.8	6.9	Static Burn. Time, min.
99.0	99.5	99.0	Length, mm
25.0	24.9	24.8	Circumference, mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.9	1.9	0.9	Component Percent
40	29	42	Permeability, ml/cm^2 x min.
			Filter
CA	CA	CA	Type
-	-	-	Inner
-	-	-	Outer
135	102	93	RTD, mm of H_2O
31.0	26.9	26.9	Length, mm
0.32	0.17	0.20	Weight, g
2.4/Y	3.0/Y	4.0/Y	Fiber denier/shape
-	-	-	Inner
-	-	-	Outer
			Tipping Paper
35.0	34.0	36.0	Length, mm
Cork	Cork	Cork	Tipping Paper Color
32	41	60	Ventilation, %
			Filler
1.91	2.30	2.21	Total alkaloids, % (DWB)
8.0	7.9	6.3	Total red. sugars, % (DWB)
25	22	13	Reconstituted Tob., %
None	None	10	Expanded Stems, %
12	11	11	Expanded Tob., %
0.762	0.825	0.819	Wt. of Tob., g (12.5% OV)
68.1	72.6	72.1	Rod Length, mm
0.225	0.231	0.231	Rod Density, g/cc
			Menthol, mg/cigt.
0.36	0.40	0.27	Smoke
3.3	2.9	2.9	Filler
1.8	1.1	1.4	Filter

*These products were smoked using the new Coresta holder designed for channel ventilated cigarettes.

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

2055656206

LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

	Belair	Marlboro Lights (Box)	Merit
[1]Sales	0.60	0.49	0.58
Smoke			
FTC Tar, mg/cigt.	9.3	9.4	10.0
Nicotine, mg/cigt.	0.68	0.75	0.78
Puffs/cigt.	8.9	9.3	9.6
Filtration Eff., %	48	54	57
Filler Rod TPM, mg/cigt.	23.9	25.0	27.4
CO, mg/cigt.	8.1	10.5	10.8
Cigarette			
Total RTD, mm of H_2O	104	118	121
Static Burn. Time, min.	6.7	7.7	7.5
Length, mm	98.8	98.8	99.7
Circumference, mm	24.9	24.9	25.0
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.2	0.7	1.9
Permeability, ml/cm^2 x min.	40	47	46
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	76	102	111
Length, mm	29.8	31.4	31.4
Weight, g	0.17	0.20	0.19
Fiber denier/shape	3.6/Y	3.9/Y	3.2/Y
Tipping Paper			
Length, mm	36.0	36.0	36.0
Tipping Paper Color	White	White	Cork
Ventilation, %	36	31	34
Filler			
Total alkaloids, % (DWB)	1.91	2.05	1.97
Total red. sugars, % (DWB)	6.4	8.4	6.8
Reconstituted Tob., %	11	22	22
Expanded Stems, %	14	None	3
Expanded Tob., %	12	15	12
Wt. of Tob., g (12.5% OV)	0.767	0.778	0.815
Rod Length, mm	69.1	67.4	68.2
Rod Density, g/cc	0.226	0.233	0.241
Menthol, mg/cigt.			
Smoke	0.32	0.54	0.58
Filler	2.3	3.0	3.6
Filter	1.3	2.0	2.0

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656207

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LOW TAR 100 MM FILTER MENTHOL CIGARETTES
(15 MG TAR OR LESS)
(Brands Ranked by FTC Tar, left to right)

B & H Lights	B & H Lights (Box)	Newport Stripes	Salem Lights (Box)	
2.15	0.25	0.45	0.46	[1]Sales
				Smoke
10.4	11.0	11.5	11.9	FTC Tar, mg/cigt.
0.77	0.81	0.87	0.90	Nicotine, mg/cigt.
10.0	9.0	9.0	9.4	Puffs/cigt.
57	52	57	52	Filtration Eff., %
31.6	27.9	29.1	27.8	Filler Rod TPM, mg/cigt.
10.2	11.5	12.7	10.6	CO, mg/cigt.
				Cigarette
118	116	146	119	Total RTD, mm of H_2O
7.6	7.5	6.9	7.4	Static Burn. Time, min.
99.6	98.7	99.4	97.8	Length, mm
24.9	24.2	24.9	24.2	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.8	1.7	2.1	0.6	Component Percent
44	44	30	38	Permeability, ml/cm^2 x min.
				Filter
CA	CA	CA	CA	Type
108	102	100	98	RTD, mm of H_2O
31.4	31.5	26.9	30.8	Length, mm
0.19	0.19	0.17	0.18	Weight, g
2.6/Y	3.3/Y	3.0/Y	4.2/Y	Fiber denier/shape
				Tipping Paper
36.0	36.0	34.0	35.0	Length, mm
White	White	White	White	Tipping Paper Color
35	29	20	26	Ventilation, %
				Filler
1.96	1.96	2.09	2.02	Total alkaloids, % (DWB)
7.9	7.0	8.0	7.0	Total red. sugars, % (DWB)
22	22	22	25	Reconstituted Tob., %
3	3	None	None	Expanded Stems, %
12	12	11	16	Expanded Tob., %
0.810	0.745	0.849	0.720	Wt. of Tob., g (12.5% OV)
68.2	67.2	72.5	66.9	Rod Length, mm
0.241	0.238	0.237	0.231	Rod Density, g/cc
				Menthol, mg/cigt.
0.64	0.63	0.49	0.54	Smoke
3.9	3.4	3.1	3.2	Filler
2.0	2.0	1.2	1.2	Filter

2055656208

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FULL FLAVORED 100 MM FILTER MENTHOL CIGARETTES
(16 MG TAR OR MORE)
(Brands Ranked by FTC Tar, left to right)

	B & H	Kool	Salem	Newport
[1]Sales	4.30	4.65	4.63	3.46
Smoke				
FTC Tar, mg/cigt.	15.9	16.2	16.6	18.7
Nicotine, mg/cigt.	1.12	1.13	1.21	1.43
Puffs/cigt.	10.4	8.8	10.0	8.9
Filtration Eff., %	49	48	47	45
Filler Rod TPM, mg/cigt.	30.1	27.2	31.0	30.2
CO, mg/cigt.	13.8	15.7	15.4	17.5
Cigarette				
Total RTD, mm of H_2O	114	132	108	129
Static Burn. Time, min.	7.7	6.8	7.8	7.3
Length, mm	99.6	99.0	99.3	99.0
Circumference, mm	24.9	24.9	24.9	24.9
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.5	0.5	0.8
Permeability, ml/cm^2 x min.	46	45	24	18
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	76	67	67	62
Length, mm	27.3	26.7	27.3	26.8
Weight, g	0.16	0.15	0.16	0.17
Fiber denier/shape	3.7/Y	3.8/Y	3.5/Y	4.8/Y
Tipping Paper				
Length, mm	32.0	32.0	32.0	34.0
Tipping Paper Color	White	Cork	White	Cork
Ventilation, %	16	None	17	None
Filler				
Total alkaloids, % (DWB)	1.92	2.15	2.07	2.36
Total red. sugars, % (DWB)	7.9	7.3	6.2	8.0
Reconstituted Tob., %	22	13	25	22
Expanded Stems, %	3	10	None	None
Expanded Tob., %	12	11	12	11
Wt. of Tob., g (12.5% OV)	0.849	0.811	0.818	0.827
Rod Length, mm	72.2	72.3	72.0	72.3
Rod Density, g/cc	0.238	0.227	0.230	0.232
Menthol, mg/cigt.				
Smoke	0.73	0.55	0.59	0.51
Filler	3.3	2.5	2.5	2.2
Filter	1.3	1.0	0.9	0.8

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656209

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

120 MM FILTER MENTHOL CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Carlton	Virginia Slims Lights (Box)	Saratoga (Box)	More
[1]Sales	0.53	1.21	0.30	1.74
Smoke				
FTC Tar, mg/cigt.	6.0	13.5	13.9	18.1
Nicotine, mg/cigt.	0.54	1.04	0.98	1.47
Puffs/cigt.	11.9	12.8	13.0	13.2
Filtration Eff., %	44	50	51	48
Filler Rod TPM, mg/cigt.	21.3	28.1	28.6	30.8
CO, mg/cigt.	3.9	13.1	13.2	20.8
Cigarette				
Total RTD, mm of H_2O	91	132	137	154
Static Burn. Time, min.	6.3	7.8	7.5	9.1
Length, mm	119.6	119.3	119.3	119.6
Circumference, mm	22.2	23.1	23.1	21.1
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.9	0.5	0.5	1.4
Color	White	White	White	Brown
Permeability, ml/cm² x min.	44	45	32	17
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	88	102	106	115
Length, mm	29.6	31.4	31.5	35.1
Weight, g	0.15	0.16	0.16	0.16
Fiber denier/shape	4.8/Y	3.6/Y	3.0/Y	5.4/Y
Tipping Paper Length, mm	35.0	36.0	36.0	39.0
Tipping Paper Color	White	White	Cork	Brown
Ventilation, %	67	31	30	31
Filler				
Total alkaloids, % (DWB)	2.21	1.89	1.92	2.23
Total red. sugars, % (DWB)	6.4	7.8	7.7	7.3
Reconstituted Tob., %	20	22	22	25
Expanded Stems, %	None	3	3	None
Expanded Tob., %	34	12	12	12
Wt. of Tob., g (12.5% OV)	0.771	0.910	0.914	0.736
Rod Length, mm	90.0	87.9	87.8	84.5
Rod Density, g/cc	0.218	0.244	0.244	0.247
Menthol, mg/cigt.				
Smoke	0.51	0.68	0.67	0.73
Filler	5.4	3.5	3.7	2.9
Filter	1.3	1.4	1.4	0.8

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

100mm SLIMS

2055656210

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM FILTER SLIM CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Virginia Slims Ultra Lights (Box)	Virginia Slims Superslims (Box)	Virginia Slims Lights (Box)
[1]Sales	1.47	0.54	2.22
Smoke			
FTC Tar, mg/cigt.	5.9	6.9	8.1
Nicotine, mg/cigt.	0.49	0.50	0.63
Puffs/cigt.	9.5	7.6	9.6
Filtration Eff., %	58	31	54
Filler Rod TPM, mg/cigt.	26.6	18.9	27.0
CO, mg/cigt.	6.3	6.3	7.9
Cigarette			
Total RTD, mm of H_2O	107	140	118
Static Burn. Time, min.	6.9	5.6	7.5
Length, mm	98.7	98.0	98.5
Circumference, mm	23.1	17.0	23.3
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.5	0.2	0.5
Permeability, ml/cm^2 x min.	43	22	36
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	129	119	122
Length, mm	31.5	27.6	31.4
Weight, g	0.17	0.08	0.17
Fiber denier/shape	3.3/Y	5.8/Y	3.1/Y
Tipping Paper Length, mm	36.0	32.0	36.0
Tipping Paper Color	White	White	White
Ventilation, %	57	60	45
Filler			
Total alkaloids, % (DWB)	1.88	2.12	1.91
Total red. sugars, % (DWB)	7.4	7.9	7.8
Reconstituted Tob., %	22	18	22
Expanded Stems, %	3	None	3
Expanded Tob., %	19	None	12
Wt. of Tob., g (12.5% OV)	0.651	0.430	0.678
Rod Length, mm	67.2	70.3	67.2
Rod Density, g/cc	0.228	0.265	0.233

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656211

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM FILTER SLIM CIGARETTES
(Brands Ranked by FTC Tar, left to right)

Capri (Box)	More Lights (Box)	Virginia Slims	
1.26	0.23	2.49	[1]Sales
			Smoke
9.5	9.8	14.3	FTC Tar, mg/cigt.
0.69	0.79	1.01	Nicotine, mg/cigt.
8.9	9.1	9.9	Puffs/cigt.
30	50	45	Filtration Eff., %
21.7	26.3	26.5	Filler Rod TPM, mg/cigt.
5.8	9.6	12.9	CO, mg/cigt.
			Cigarette
145	112	123	Total RTD, mm of H_2O
7.3	7.3	7.8	Static Burn. Time, min.
97.1	97.7	99.5	Length, mm
17.2	22.8	23.1	Circumference,mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.3	1.2	0.5	Component Percent
23	38	45	Permeability, ml/cm2 x min.
			Filter
CA	CA	CA	Type
108	101	81	RTD, mm of H_2O
27.0	30.9	27.5	Length, mm
0.08	0.15	0.15	Weight, g
5.7/Y	3.1/Y	3.5/Y	Fiber denier/shape
			Tipping Paper
32.0	35.0	32.0	Length, mm
White	Beige	White	Tipping Paper Color
52	40	20	Ventilation, %
			Filler
1.92	1.99	1.92	Total alkaloids, % (DWB)
6.3	7.2	8.1	Total red. sugars, % (DWB)
19	25	22	Reconstituted Tob., %
None	None	3	Expanded Stems, %
None	12	12	Expanded Tob., %
0.437	0.641	0.728	Wt. of Tob., g (12.5% OV)
70.1	66.8	72.1	Rod Length, mm
0.265	0.232	0.238	Rod Density, g/cc

2055656212

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM FILTER SLIM MENTHOL CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Virginia Slims Ultra Lights (Box)	Virginia Slims Superslims (Box)	Virginia Slims Lights (Box)
[1]Sales	1.18	0.61	2.53
Smoke			
FTC Tar, mg/cigt.	5.7	6.6	8.6
Nicotine, mg/cigt.	0.47	0.48	0.66
Puffs/cigt.	9.8	8.0	9.6
Filtration Eff., %	58	31	54
Filler Rod TPM, mg/cigt.	25.9	20.2	26.6
CO, mg/cigt.	5.2	6.1	8.5
Cigarette			
Total RTD, mm of H_2O	104	148	113
Static Burn. Time, min.	7.3	6.2	7.7
Length, mm	98.5	98.6	98.6
Circumference,mm	23.1	17.0	23.1
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.5	0.6	0.5
Permeability, ml/cm² x min.	45	23	45
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	126	119	110
Length, mm	31.5	27.5	31.4
Weight, g	0.17	0.07	0.16
Fiber denier/shape	3.3/Y	5.5/Y	3.2/Y
Tipping Paper Length, mm	36.0	32.0	36.0
Tipping Paper Color	White	White	White
Ventilation, %	58	61	42
Filler			
Total alkaloids, % (DWB)	1.88	2.12	1.91
Total red. sugars, % (DWB)	7.9	7.2	7.8
Reconstituted Tob., %	22	18	22
Expanded Stems, %	3	None	3
Expanded Tob., %	19	None	12
Wt. of Tob., g (12.5% OV)	0.654	0.430	0.687
Rod Length, mm	67.0	71.1	67.1
Rod Density, g/cc	0.229	0.264	0.240
Menthol, mg/cigt.			
Smoke	0.44	0.89	0.58
Filler	3.4	4.2	3.3
Filter	2.0	1.1	1.9

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656213

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM FILTER SLIM MENTHOL CIGARETTES
(Brands Ranked by FTC Tar, left to right)

Salem Slims Lights (Box)	More Lights (Box)	Capri (Box)	Virginia Slims	
2.48	0.18	1.06	2.10	[1]Sales
				Smoke
8.9	9.2	9.5	14.4	FTC Tar, mg/cigt.
0.69	0.72	0.69	0.99	Nicotine, mg/cigt.
8.4	9.0	9.2	9.8	Puffs/cigt.
50	48	31	47	Filtration Eff., %
25.0	26.3	13.4	27.4	Filler Rod TPM, mg/cigt.
9.5	9.1	6.6	12.5	CO, mg/cigt.
				Cigarette
114	103	170	118	Total RTD, mm of H_2O
7.0	7.1	7.3	7.6	Static Burn. Time, min.
98.0	97.7	96.9	99.1	Length, mm
22.7	22.7	17.1	23.1	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.9	1.2	0.3	0.6	Component Percent
39	38	24	44	Permeability, ml/cm^2 x min.
				Filter
CA	CA	CA	CA	Type
104	100	109	78	RTD, mm of H_2O
31.0	30.9	26.8	27.4	Length, mm
0.15	0.15	0.07	0.16	Weight, g
3.4/Y	3.3/Y	5.7/Y	3.4/Y	Fiber denier/shape
				Tipping Paper
35.0	35.0	32.0	32.0	Length, mm
White	Beige	White	White	Tipping Paper Color
39	42	47	20	Ventilation, %
				Filler
2.01	1.93	1.72	1.88	Total alkaloids, % (DWB)
8.2	7.0	6.5	7.6	Total red. sugars, % (DWB)
25	25	11	22	Reconstituted Tob., %
None	None	None	3	Expanded Stems, %
16	12	None	12	Expanded Tob., %
0.627	0.642	0.435	0.737	Wt. of Tob., g (12.5% OV)
67.0	66.8	70.1	71.7	Rod Length, mm
0.228	0.234	0.266	0.242	Rod Density, g/cc
				Menthol, mg/cigt.
0.62	0.61	0.67	0.65	Smoke
3.7	3.4	3.3	3.0	Filler
1.4	1.4	1.0	1.2	Filter

CHARCOAL

2055656214

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM CHARCOAL FILTER CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	B & H Multifilter	Lark Lights	Tareyton
[1]Sales	0.15	0.31	1.53
Smoke			
FTC Tar, mg/cigt.	10.6	11.6	13.9
Nicotine, mg/cigt.	0.84	0.83	1.00
Puffs/cigt.	8.3	7.2	8.3
Filtration Eff., %	48	44	53
Filler Rod TPM, mg/cigt.	32.2	23.2	28.2
Gas Phase Smoke Index, % Reduction	52	22	22
CO, mg/cigt.	9.3	9.9	15.0
Cigarette			
Total RTD, mm of H_2O	80	114	118
Static Burn. Time, min.	8.3	6.7	7.2
Length, mm	84.2	83.8	84.9
Circumference, mm	24.9	24.8	25.0
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.6	0.5	0.8
Permeability, ml/cm² x min.	31	175**	48
Filter			
Type	-	-*	-
Inner	C-CA	CA	C in Paper
Outer	CA-PL	CA	CA
RTD, mm of H_2O	76	67	62
Length, mm	25.0	24.8	20.0
Weight, g	0.34	0.17	0.17
Fiber denier/shape	-	-	-
Inner	3.4/I	3.6/Y	-
Outer	3.2/Y	3.8/Y	4.2/Y
Carbon, mg/plug	38	51	33
Tipping Paper			
Length, mm	30.0	30.0	24.0
Tipping Paper Color	White	Cork	Cork
Ventilation, %	32	None	None
Filler			
Total alkaloids, % (DWB)	1.94	1.90	2.13
Total red. sugars, % (DWB)	6.6	7.5	8.4
Reconstituted Tob., %	22	15	20
Expanded Stems, %	3	5	3
Expanded Tob., %	12	23	17
Wt. of Tob., g (12.5% OV)	0.690	0.611	0.754
Rod Length, mm	59.2	59.0	64.9
Rod Density, g/cc	0.236	0.212	0.233

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.
*Space containing carbon granules.
**These cigarettes papers are perforated.

2055656215

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM CHARCOAL FILTER CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Tareyton Long Lights	Parliament Lights	Lark Lights	Tareyton
[1]Sales	0.18	1.74	0.22	1.41
Smoke				
FTC Tar, mg/cigt.	8.6	11.8	12.9	13.9
Nicotine, mg/cigt.	0.72	0.93	0.94	1.03
Puffs/cigt.	10.9	9.8	8.6	9.5
Filtration Eff., %	58	55	48	60
Filler Rod TPM, mg/cigt.	25.9	30.3	23.2	25.8
Gas Phase Smoke Index, % Reduction	52	54	25	22
CO, mg/cigt.	9.1	12.0	11.2	16.4
Cigarette				
Total RTD, mm of H_2O	111	117	126	139
Static Burn. Time, min.	7.2	7.9	6.8	7.3
Length, mm	99.8	98.5	98.8	99.9
Circumference, mm	24.9	24.9	24.7	24.8
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	1.0	0.6	0.4	0.8
Permeability, ml/cm^2 x min.	55	44	164**	45
Filter				
Type	-	-	-*	-
Inner	C in Paper	C-CA	CA	C in Paper
Outer	CA	CA	CA	CA
RTD, mm of H_2O	92	110	70	71
Length, mm	26.9	30.0[2]	29.7	26.9
Weight, g	0.21	0.22	0.18	0.20
Fiber denier/shape	-	-	-	-
Inner	-	4.8/X	3.9/Y	-
Outer	3.2/I	3.2/Y	3.8/Y	4.7/Y
Carbon, mg/plug	8	56	47	36
Tipping Paper Length, mm	32.0	36.0	35.0	32.0
Tipping Paper Color	Cork	White	Cork	Cork
Ventilation, %	42	32	None	None
Filler				
Total alkaloids, % (DWB)	2.09	1.96	1.92	2.10
Total red. sugars, % (DWB)	8.2	7.1	7.4	8.9
Reconstituted Tob., %	20	22	15	20
Expanded Stems, %	3	3	5	3
Expanded Tob., %	17	12	23	17
Wt. of Tob., g (12.5% OV)	0.853	0.787	0.713	0.840
Rod Length, mm	72.8	68.5	69.1	73.0
Rod Density, g/cc	0.238	0.233	0.212	0.235

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.
[2]The reported value includes the recessed portion.
*Space containing carbon granules.
**These cigarette papers are perforated.

80mm FILTER
70-85 mm NF

2055656216

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

80 MM FILTER CIGARETTES (BOX)
(Brands Ranked by FTC Tar, left to right)

	Winston Lights	Parliament Lights	Camel Lights	Marlboro	Winston
[1]Sales	0.88	1.73	1.95	34.57	2.26
Smoke					
FTC Tar, mg/cigt.	9.0	9.2	9.7	16.3	16.3
Nicotine, mg/cigt.	0.63	0.69	0.63	1.10	1.12
Puffs/cigt.	7.3	7.1	7.6	8.6	8.0
Filtration Eff., %	59	54	58	44	45
Filler Rod TPM, mg/cigt.	30.9	30.2	29.8	32.8	32.5
CO, mg/cigt.	11.0	10.0	11.5	13.2	14.5
Cigarette					
Total RTD, mm of H_2O	141	121	142	109	118
Static Burn. Time, min.	7.8	7.9	7.5	8.2	8.4
Length, mm	79.0	79.0	79.1	78.9	78.9
Circumference, mm	25.0	24.9	25.0	24.9	25.0
Paper					
Component Type	Cit.	Cit.	Cit.	Cit.	Cit.
Component Percent	0.4	(2.0)	0.4	0.5	0.6
Permeability, ml/cm² x min.	23	43	24	30	35
Filter					
Type	CA	CA	CA	CA	CA
RTD, mm of H_2O	115	117	116	70	72
Length, mm	19.0	25.1[2]	19.0	19.0	19.1
Weight, g	0.14	0.13	0.14	0.12	0.13
Fiber denier/shape	2.0/Y	2.4/Y	2.7/Y	3.1/Y	2.6/Y
Tipping Paper					
Length, mm	27.0	30.0	27.0	23.0	23.0
Tipping Paper Color	Cork	White	Cork	Cork	Cork
Ventilation, %	20	29	22	12	None
Filler					
Total alkaloids, % (DWB)	1.80	1.97	1.86	1.93	2.02
Total red. sugars, % (DWB)	7.3	6.2	7.1	8.1	6.4
Reconstituted Tob., %	25	22	25	22	25
Expanded Stems, %	None	3	None	3	None
Expanded Tob., %	12	12	12	12	12
Wt. of Tob., g (12.5% OV)	0.656	0.626	0.651	0.710	0.694
Rod Length, mm	60.0	53.9	60.1	59.9	59.8
Rod Density, g/cc	0.221	0.236	0.218	0.240	0.234

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.
[2]The reported value includes the recessed portion.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NON-FILTER CIGARETTES
(Brands Ranked by FTC Tar, left to right)

	Chesterfield King	Camel	Lucky Strike	Pall Mall	Commander King Size
[1]Sales	0.88	6.32	2.14	8.91	0.26
Smoke					
FTC Tar, mg/cigt.	21.0	21.5	23.7	23.3	24.8
Nicotine, mg/cigt.	1.29	1.51	1.52	1.53	1.49
Puffs/cigt.	9.1	7.2	7.7	9.2	9.1
Filler Rod TPM, mg/cigt.	25.6	30.3	25.8	28.5	29.8
CO, mg/cigt.	11.8	11.6	13.9	13.6	13.4
Cigarette					
Total RTD, mm of H_2O	91	56	58	71	61
Static Burn. Time, min.	7.3	7.9	9.6	7.8	7.6
Length, mm	83.9	68.8	68.8	84.1	83.9
Circumference, mm	25.0	24.9	25.0	24.8	24.9
Paper					
Component Type	Cit.	Cit.	Phos.	Cit.	Cit.
Component Percent	0.6	0.5	0.2	0.7	2.4
Permeability, ml/cm^2 x min.	45	24	16	34	45
Filler					
Total alkaloids, % (DWB)	1.88	2.35	2.02	2.03	1.95
Total red. sugars, % (DWB)	10.6	7.0	9.7	10.4	9.0
Reconstituted Tob., %	10	15	20	20	18
Expanded Stems, %	5	None	3	3	3
Expanded Tob., %	19	12	11	11	13
Wt. of Tob., g (12.5% OV)	0.961	0.779	0.851	1.036	0.974
Rod Density, g/cc	0.231	0.230	0.248	0.252	0.235

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

BRANDED GENERICS

2055656218

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Doral Ultra Lights	Magna Lites (Box)	Malibu Lights
[1]Sales	2.68	0.36	0.17
Smoke			
FTC Tar, mg/cigt.	5.4 .6 pp	8.8	9.5
Nicotine, mg/cigt.	0.51	0.66	0.79
Puffs/cigt.	8.9	7.5	8.1
Filtration Eff., %	62	58	50
Filler Rod TPM, mg/cigt.	32.4	30.1	28.5
CO, mg/cigt.	6.4	10.8	9.0
Cigarette			
Total RTD, mm of H_2O	91	139	107
Static Burn. Time, min.	8.7	7.0	7.2
Length, mm	83.6	78.8	82.7
Circumference, mm	24.9	25.0	25.0
Paper			
Component Type	Phos.	Cit.	Cit.
Component Percent	0.2	0.6	0.7
Permeability, ml/cm^2 x min.	26	25	44
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	115	120	90
Length, mm	26.9	19.1	24.9
Weight, g	0.17	0.14	0.18
Fiber denier/shape	3.0/Y	2.2/Y	4.0/Y
Tipping Paper			
Length, mm	31.0	27.0	30.0
Tipping Paper Color	White	White	White
Ventilation, %	58	27	33
Filler			
Total alkaloids, % (DWB)	2.21	1.87	1.99
Total red. sugars, % (DWB)	7.6	7.1	7.1
Reconstituted Tob., %	25	25	20
Expanded Stems, %	None	None	None
Expanded Tob., %	21	12	12
Wt. of Tob., g (12.5% OV)	0.598	0.649	0.683
Rod Length, mm	56.7	59.7	57.8
Rod Density, g/cc	0.213	0.219	0.238

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

5.6
10.565

2055656219

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Bristol Lights	Doral Lights	Pyramid Lights	
0.83	3.32	0.89	[1]Sales
			Smoke
10.4	10.7	11.2	FTC Tar, mg/cigt.
0.80	0.86	0.82	Nicotine, mg/cigt.
7.2	7.7 1.4	7.7	Puffs/cigt.
54	54	53	Filtration Eff., %
32.6	32.7	29.9	Filler Rod TPM, mg/cigt.
11.5	10.7	11.7	CO, mg/cigt.
			Cigarette
112	102	125	Total RTD, mm of H_2O
7.4	8.0	8.0	Static Burn. Time, min.
84.1	83.9	83.6	Length, mm
24.9	24.8	24.8	Circumference,mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.4	0.4	0.5	Component Percent
22	26	61	Permeability, ml/cm² x min.
			Filter
CA	CA	CA	Type
97	83	90	RTD, mm of H_2O
26.9	26.8	24.9	Length, mm
0.17	0.16	0.15	Weight, g
3.2/Y	3.1/Y	3.2/Y	Fiber denier/shape
			Tipping Paper
32.0	31.0	30.0	Length, mm
Cork	Cork	Cork	Tipping Paper Color
20	28	21	Ventilation, %
			Filler
2.10	2.33	1.90	Total alkaloids, % (DWB)
5.7	7.2	7.1	Total red. sugars, % (DWB)
15	25	15	Reconstituted Tob., %
10	None	5	Expanded Stems, %
None	21	23	Expanded Tob., %
0.603	0.602	0.616	Wt. of Tob., g (12.5% OV)
57.3	57.2	58.7	Rod Length, mm
0.214	0.214	0.215	Rod Density, g/cc

57 mm
10.578

0.26 mg/mm

657 60 m/mm Bristol

2055656220

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Viceroy Lights	American Lights	Cambridge Lights	Magna Lites
[1]Sales	0.65	0.40	2.02	0.49
Smoke				
FTC Tar, mg/cigt.	11.9	12.0	12.3	12.8
Nicotine, mg/cigt.	0.90	0.95	0.83	0.92
Puffs/cigt.	8.4	8.4	8.3	8.0
Filtration Eff., %	58	50	50	56
Filler Rod TPM, mg/cigt.	31.3	31.9	33.6	34.8
CO, mg/cigt.	11.7	11.6	11.9	12.5
Cigarette				
Total RTD, mm of H_2O	131	116	106	115
Static Burn. Time, min.	7.9	8.2	8.1	8.6
Length, mm	83.6	82.9	84.1	84.0
Circumference, mm	24.9	25.0	24.9	25.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.8	0.7	0.5	0.5
Permeability, ml/cm² x min.	31	27	26	24
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	103	86	84	84
Length, mm	26.9	25.0	27.0	26.9
Weight, g	0.17	0.17	0.17	0.16
Fiber denier/shape	2.5/Y	3.8/Y	3.8/Y	2.3/Y
Tipping Paper Length, mm	32.0	30.0	31.0	31.0
Tipping Paper Color	Cork	White	Cork	White
Ventilation, %	20	22	23	16
Filler				
Total alkaloids, % (DWB)	2.12	2.03	1.90	1.95
Total red. sugars, % (DWB)	6.2	7.8	7.6	6.9
Reconstituted Tob., %	16	20	22	25
Expanded Stems, %	5	None	3	None
Expanded Tob., %	None	12	15	12
Wt. of Tob., g (12.5% OV)	0.717	0.701	0.666	0.663
Rod Length, mm	56.7	57.9	57.0	57.1
Rod Density, g/cc	0.256	0.244	0.237	0.234

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

27 m

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Magna (Box)	Doral Full Flavor	Magna	@ Malibu	
0.54	2.37	0.69	0.14	[1]Sales
				Smoke
13.5	15.6	15.8	15.8	FTC Tar, mg/cigt.
0.82	1.16	1.18	1.22	Nicotine, mg/cigt.
6.5	8.1	8.4	9.2	Puffs/cigt.
45	46	48	41	Filtration Eff., %
25.0	29.7	32.9	31.1	Filler Rod TPM, mg/cigt.
13.4	13.9	15.4	14.4	CO, mg/cigt.
				Cigarette
115	109	120	98	Total RTD, mm of H_2O
6.5	7.7	7.7	8.1	Static Burn. Time, min.
78.9	83.9	84.0	84.7	Length, mm
25.0	24.9	25.0	25.0	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.5	0.5	0.4	0.8	Component Percent
36	24	26	50	Permeability, ml/cm² x min.
				Filter
CA	CA	CA	CA	Type
70	70	72	58	RTD, mm of H_2O
19.0	20.9	21.0	20.2	Length, mm
0.13	0.12	0.14	0.14	Weight, g
3.4/Y	3.0/Y	3.4/Y	4.5/Y	Fiber denier/shape
				Tipping Paper
23.0	25.0	25.0	24.0	Length, mm
Cork	Cork	Cork	Cork	Tipping Paper Color
None	10	8	16	Ventilation, %
				Filler
2.17	2.28	2.21	2.02	Total alkaloids, % (DWB)
6.6	7.4	6.8	7.8	Total red. sugars, % (DWB)
25	25	25	20	Reconstituted Tob., %
None	None	None	None	Expanded Stems, %
12	21	12	12	Expanded Tob., %
0.622	0.667	0.724	0.834	Wt. of Tob., g (12.5% OV)
59.8	63.0	62.9	64.6	Rod Length, mm
0.210	0.215	0.232	0.260	Rod Density, g/cc

58 m/m
10.7 mt

85
20
—
65

2055656222

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Cambridge Full Flavor	American Filters	Viceroy	Pyramid 85 (NF)
[1]Sales	1.61	0.27	2.91	0.64
Smoke				
FTC Tar, mg/cigt.	16.4	16.5	16.7	20.7
Nicotine, mg/cigt.	1.08	1.28	1.20	1.24
Puffs/cigt.	8.5	9.4	8.8	9.1
Filtration Eff., %	46	40	46	-
Filler Rod TPM, mg/cigt.	30.3	28.3	34.4	27.6
CO, mg/cigt.	14.4	14.7	14.0	11.8
Cigarette				
Total RTD, mm of H_2O	121	107	118	83
Static Burn. Time, min.	7.8	7.9	8.1	7.4
Length, mm	83.9	84.9	83.9	83.7
Circumference,mm	24.9	24.9	24.9	25.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.9	0.5	0.8
Permeability, ml/cm^2 x min.	42	49	22	47
Filter				
Type	CA	CA	CA	-
RTD, mm of H_2O	71	59	76	-
Length, mm	20.9	19.9	21.0	-
Weight, g	0.12	0.13	0.12	-
Fiber denier/shape	2.8/Y	4.5/Y	3.9/Y	-
Tipping Paper				
Length, mm	25.0	24.0	26.0	-
Tipping Paper Color	Cork	Cork	Cork	-
Ventilation, %	None	12	10	-
Filler				
Total alkaloids, % (DWB)	1.89	1.98	1.96	1.87
Total red. sugars, % (DWB)	7.8	7.8	6.5	9.3
Reconstituted Tob., %	22	20	12	10
Expanded Stems, %	3	None	7	5
Expanded Tob., %	15	12	11	19
Wt. of Tob., g (12.5% OV)	0.736	0.804	0.730	0.947
Rod Length, mm	63.0	65.0	62.9	83.7
Rod Density, g/cc	0.237	0.251	0.235	0.229

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656223

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM MENTHOL BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Alpine Lights	Bristol Lights	Doral Lights
[1]Sales	0.66	0.35	1.37
Smoke			
FTC Tar, mg/cigt.	9.5	10.5	10.6
Nicotine, mg/cigt.	0.69	0.83	0.84
Puffs/cigt.	7.7	7.2	8.4
Filtration Eff., %	52	51	51
Filler Rod TPM, mg/cigt.	29.1	35.5	30.5
CO, mg/cigt.	9.6	11.9	9.8
Cigarette			
Total RTD, mm of H_2O	110	112	93
Static Burn. Time, min.	7.9	8.1	8.0
Length, mm	83.8	84.1	84.1
Circumference, mm	24.9	24.9	24.9
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.4	0.6	0.5
Permeability, ml/cm² x min.	36	26	24
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	87	98	83
Length, mm	27.0	27.1	26.9
Weight, g	0.17	0.17	0.17
Fiber denier/shape	3.0/Y	3.2/Y	3.6/Y
Tipping Paper Length, mm	31.0	32.0	31.0
Tipping Paper Color	White	White	Cork
Ventilation, %	27	20	35
Filler			
Total alkaloids, % (DWB)	2.11	2.19	2.04
Total red. sugars, % (DWB)	8.4	5.7	7.8
Reconstituted Tob., %	22	15	25
Expanded Stems, %	5	10	None
Expanded Tob., %	15	None	16
Wt. of Tob., g (12.5% OV)	0.649	0.611	(0.674)
Rod Length, mm	56.9	57.0	57.1
Rod Density, g/cc	0.231	0.217	(0.238)
Menthol, mg/cigt.			
Smoke	0.56	0.47	0.56
Filler	2.6	2.1	2.9
Filter	1.9	1.7	1.4

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656224

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM MENTHOL BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Cambridge Lights	Alpine	Doral Full Flavor
[1]Sales	0.68	0.62	0.55
Smoke			
FTC Tar, mg/cigt.	11.9	16.0	17.4
Nicotine, mg/cigt.	0.86	0.97	1.24
Puffs/cigt.	8.4	8.1	9.2
Filtration Eff., %	53	43	46
Filler Rod TPM, mg/cigt.	31.3	31.6	30.7
CO, mg/cigt.	11.5	15.1	15.1
Cigarette			
Total RTD, mm of H_2O	113	125	106
Static Burn. Time, min.	7.9	7.5	7.5
Length, mm	83.9	83.8	83.9
Circumference, mm	25.0	24.9	24.8
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.5	2.0	0.5
Permeability, ml/cm² x min.	27	46	24
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	92	64	64
Length, mm	27.0	21.1	20.9
Weight, g	0.17	0.13	0.13
Fiber denier/shape	3.9/Y	3.4/Y	2.5/Y
Tipping Paper			
Length, mm	31.0	25.0	25.0
Tipping Paper Color	White	White	Cork
Ventilation, %	24	None	12
Filler			
Total alkaloids, % (DWB)	1.98	2.02	2.23
Total red. sugars, % (DWB)	6.8	8.9	7.4
Reconstituted Tob., %	22	22	25
Expanded Stems, %	3	5	None
Expanded Tob., %	15	15	16
Wt. of Tob., g (12.5% OV)	0.665	0.726	0.736
Rod Length, mm	56.9	62.8	63.0
Rod Density, g/cc	0.236	0.235	0.238
Menthol, mg/cigt.			
Smoke	0.68	0.66	0.53
Filler	2.7	2.3	2.0
Filter	1.5	1.1	0.7

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656225

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Cambridge Ultra Low Tar	Doral Ultra Lights	Malibu Ultra Lights
[1]Sales	2.09	0.86	0.43
Smoke			
FTC Tar, mg/cigt.	4.2	5.5	6.0
Nicotine, mg/cigt.	0.37	0.52	0.51
Puffs/cigt.	10.8	11.0	9.3
Filtration Eff., %	68	66	61
Filler Rod TPM, mg/cigt.	28.5	33.6	26.1
CO, mg/cigt.	5.9	7.1	7.3
Cigarette			
Total RTD, mm of H_2O	106	102	129
Static Burn. Time, min.	7.6	7.8	6.5
Length, mm	99.6	98.8	99.5
Circumference,mm	25.0	24.9	24.5
Paper			
Component Type	Cit.	Phos.	Cit.
Component Percent	0.5	0.2	0.9
Permeability, ml/cm^2 x min.	34	24	46
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	143	135	125
Length, mm	31.5	31.0	26.7
Weight, g	0.20	0.20	0.17
Fiber denier/shape	2.9/Y	3.2/Y	3.2/I
Tipping Paper			
Length, mm	36.0	35.0	35.0
Tipping Paper Color	White	White	White
Ventilation, %	60	60	48
Filler			
Total alkaloids, % (DWB)	1.90	2.20	2.07
Total red. sugars, % (DWB)	7.8	8.2	6.5
Reconstituted Tob., %	22	25	24
Expanded Stems, %	3	None	None
Expanded Tob., %	15	21	24
Wt. of Tob., g (12.5% OV)	0.782	0.704	0.743
Rod Length, mm	68.2	67.9	72.9
Rod Density, g/cc	0.231	0.211	0.214

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055956226

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Pyramid Ultra Lights	Malibu Lights	Bristol Lights
[1]Sales	1.06	0.71	0.97
Smoke			
FTC Tar, mg/cigt.	6.1	9.8	10.5
Nicotine, mg/cigt.	0.50	0.83	0.86
Puffs/cigt.	9.5	10.1	9.0
Filtration Eff., %	52	59	59
Filler Rod TPM, mg/cigt.	25.5	25.9	30.9
CO, mg/cigt.	5.4	10.4	13.1
Cigarette			
Total RTD, mm of H_2O	80	126	116
Static Burn. Time, min.	6.9	7.4	6.9
Length, mm	98.8	99.5	99.6
Circumference,mm	24.8	24.4	24.8
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	0.7	0.9	0.5
Permeability, ml/cm^2 x min.	30	48	23
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	84	105	107
Length, mm	29.8	26.7	31.5
Weight, g	0.17	0.16	0.19
Fiber denier/shape	3.4/Y	3.9/Y	3.2/Y
Tipping Paper Length, mm	35.0	32.0	36.0
Tipping Paper Color	White	White	Cork
Ventilation, %	61	34	28
Filler			
Total alkaloids, % (DWB)	1.92	2.02	2.18
Total red. sugars, % (DWB)	7.2	8.1	6.4
Reconstituted Tob., %	15	20	15
Expanded Stems, %	5	None	10
Expanded Tob., %	23	12	None
Wt. of Tob., g (12.5% OV)	0.723	0.823	0.724
Rod Length, mm	69.1	72.8	68.2
Rod Density, g/cc	0.214	0.238	0.217

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656227

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Pyramid Lights	Cambridge Lights	Doral Lights	
1.06	2.92	4.66	[1]Sales
			Smoke
11.8	11.9	11.9	FTC Tar, mg/cigt.
0.94	0.85	0.99	Nicotine, mg/cigt.
9.9	10.1	10.2	Puffs/cigt.
52	58	50	Filtration Eff., %
29.0	31.4	29.4	Filler Rod TPM, mg/cigt.
11.9	12.9	10.0	CO, mg/cigt.
			Cigarette
113	126	92	Total RTD, mm of H_2O
7.7	8.1	7.5	Static Burn. Time, min.
99.0	99.4	99.1	Length, mm
24.8	24.9	24.9	Circumference,mm
			Paper
Cit.	Cit.	Cit.	Component Type
0.5	0.5	0.5	Component Percent
64	24	23	Permeability, ml/cm^2 x min.
			Filter
CA	CA	CA	Type
81	108	76	RTD, mm of H_2O
29.7	31.3	31.0	Length, mm
0.17	0.19	0.17	Weight, g
4.2/Y	2.8/Y	3.8/Y	Fiber denier/shape
			Tipping Paper
35.0	36.0	35.0	Length, mm
Cork	Cork	Cork	Tipping Paper Color
31	27	38	Ventilation, %
			Filler
1.91	1.88	2.32	Total alkaloids, % (DWB)
7.1	7.7	7.4	Total red. sugars, % (DWB)
15	22	25	Reconstituted Tob., %
5	3	None	Expanded Stems, %
23	15	21	Expanded Tob., %
0.725	0.786	0.728	Wt. of Tob., g (12.5% OV)
69.3	68.0	68.1	Rod Length, mm
0.214	0.234	0.216	Rod Density, g/cc

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Viceroy Lights	American Lights	Doral Full Flavor
[1]Sales	0.71	0.70	3.20
Smoke			
FTC Tar, mg/cigt.	12.3	12.5	15.8
Nicotine, mg/cigt.	0.93	1.00	1.20
Puffs/cigt.	9.6	10.2	8.5
Filtration Eff., %	57	51	54
Filler Rod TPM, mg/cigt.	30.6	26.9	30.1
CO, mg/cigt.	13.2	11.8	16.6
Cigarette			
Total RTD, mm of H_2O	131	121	132
Static Burn. Time, min.	7.5	7.3	7.0
Length, mm	98.7	99.6	98.6
Circumference, mm	24.9	24.1	24.8
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.0	0.9	0.4
Permeability, ml/cm^2 x min.	45	50	24
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	100	88	80
Length, mm	29.9	26.8	30.8
Weight, g	0.18	0.17	0.18
Fiber denier/shape	2.9/Y	3.8/Y	3.5/Y
Tipping Paper			
Length, mm	36.0	32.0	35.0
Tipping Paper Color	Cork	White	Cork
Ventilation, %	20	26	None
Filler			
Total alkaloids, % (DWB)	1.97	1.99	2.25
Total red. sugars, % (DWB)	6.9	7.7	7.3
Reconstituted Tob., %	16	20	25
Expanded Stems, %	5	None	None
Expanded Tob., %	None	12	21
Wt. of Tob., g (12.5% OV)	0.850	0.831	0.719
Rod Length, mm	68.8	72.8	67.8
Rod Density, g/cc	0.250	0.247	0.217

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656229

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Malibu	Cambridge Full Flavor	American Filters	Viceroy	
0.40	2.05	0.41	1.56	[1]Sales
				Smoke
16.3	16.5	16.8	17.4	FTC Tar, mg/cigt.
1.24	1.08	1.27	1.20	Nicotine, mg/cigt.
9.8	8.4	10.0	10.2	Puffs/cigt.
46	48	46	52	Filtration Eff., %
26.5	28.0	24.5	33.2	Filler Rod TPM, mg/cigt.
14.8	16.3	16.1	15.4	CO, mg/cigt.
				Cigarette
112	107	126	122	Total RTD, mm of H_2O
7.4	7.1	7.7	7.9	Static Burn. Time, min.
99.8	99.6	99.9	98.8	Length, mm
24.5	24.9	24.5	24.9	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
1.0	1.6	0.8	0.5	Component Percent
46	45	25	24	Permeability, ml/cm² x min.
				Filter
CA	CA	CA	CA	Type
64	62	66	80	RTD, mm of H_2O
26.8	31.4	26.7	26.8	Length, mm
0.15	0.18	0.16	0.16	Weight, g
6.6/Y	4.4/Y	4.5/Y	3.0/Y	Fiber denier/shape
				Tipping Paper
32.0	36.0	32.0	32.0	Length, mm
Cork	Cork	Cork	Cork	Tipping Paper Color
11	None	8	14	Ventilation, %
				Filler
2.01	1.88	2.05	1.89	Total alkaloids, % (DWB)
8.1	7.7	8.5	6.6	Total red. sugars, % (DWB)
20	22	20	12	Reconstituted Tob., %
None	3	None	7	Expanded Stems, %
12	15	12	11	Expanded Tob., %
0.841	0.790	0.841	0.833	Wt. of Tob., g (12.5% OV)
73.0	68.2	73.1	72.0	Rod Length, mm
0.242	0.235	0.241	0.235	Rod Density, g/cc

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM MENTHOL BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Alpine Lights	Doral Lights	Bristol Lights	Cambridge Lights
[1]Sales	1.03	2.70	0.55	1.61
Smoke				
FTC Tar, mg/cigt.	9.7	10.2	11.0	11.8
Nicotine, mg/cigt.	0.74	0.82	0.90	0.82
Puffs/cigt.	9.4	9.9	9.2	10.1
Filtration Eff., %	55	62	57	58
Filler Rod TPM, mg/cigt.	28.1	30.2	33.0	32.9
CO, mg/cigt.	11.2	12.9	13.0	13.3
Cigarette				
Total RTD, mm of H_2O	119	120	122	126
Static Burn. Time, min.	7.7	8.0	7.6	7.7
Length, mm	99.5	98.8	98.9	99.4
Circumference, mm	25.0	24.9	24.9	25.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.6	0.6	0.5
Permeability, ml/cm^2 x min.	33	26	28	28
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	97	114	108	107
Length, mm	31.6	30.9	31.5	31.4
Weight, g	0.19	0.19	0.19	0.19
Fiber denier/shape	3.0/Y	2.6/Y	3.2/Y	2.8/Y
Tipping Paper Length, mm	36.0	35.0	36.0	36.0
Tipping Paper Color	White	Cork	White	White
Ventilation, %	30	35	26	27
Filler				
Total alkaloids, % (DWB)	2.01	1.98	2.17	1.91
Total red. sugars, % (DWB)	8.6	8.2	6.3	8.1
Reconstituted Tob., %	22	25	15	22
Expanded Stems, %	5	None	10	3
Expanded Tob., %	15	16	None	15
Wt. of Tob., g (12.5% OV)	0.785	(0.804)	0.754	0.787
Rod Length, mm	67.9	68.0	67.5	68.1
Rod Density, g/cc	0.232	(0.240)	0.227	0.232
Menthol, mg/cigt.				
Smoke	0.52	0.55	0.50	0.73
Filler	3.0	3.5	2.7	3.8
Filter	2.2	1.6	1.9	1.7

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM MENTHOL BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Pyramid Lights	Malibu Low Tar	Alpine	Doral Full Flavor	
0.43	0.61	0.77	0.77	[1]Sales
				Smoke
11.7	12.3	15.1	16.6	FTC Tar, mg/cigt.
0.91	0.98	1.04	1.25	Nicotine, mg/cigt.
9.9	10.4	9.5	9.6	Puffs/cigt.
51	52	45	51	Filtration Eff., %
29.8	28.4	25.5	30.3	Filler Rod TPM, mg/cigt.
11.4	11.4	14.5	16.0	CO, mg/cigt.
				Cigarette
112	115	113	124	Total RTD, mm of H_2O
7.9	7.3	7.4	7.7	Static Burn. Time, min.
99.1	99.6	99.7	98.8	Length, mm
24.8	24.5	24.9	25.0	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
0.5	0.9	0.5	0.4	Component Percent
66	46	45	24	Permeability, ml/cm^2 x min.
				Filter
CA	CA	CA	CA	Type
81	86	61	74	RTD, mm of H_2O
29.8	26.8	27.4	31.0	Length, mm
0.17	0.17	0.17	0.18	Weight, g
4.4/Y	3.8/Y	4.5/Y	3.8/Y	Fiber denier/shape
				Tipping Paper
35.0	32.0	32.0	35.0	Length, mm
White	White	White	Cork	Tipping Paper Color
31	31	12	8	Ventilation, %
				Filler
1.93	2.04	2.00	2.25	Total alkaloids, % (DWB)
7.6	9.2	8.4	7.8	Total red. sugars, % (DWB)
15	20	22	25	Reconstituted Tob., %
5	None	5	None	Expanded Stems, %
23	12	15	16	Expanded Tob., %
0.730	0.850	0.821	0.815	Wt. of Tob., g (12.5% OV)
69.3	72.9	72.2	67.8	Rod Length, mm
0.216	0.245	0.231	0.242	Rod Density, g/cc
				Menthol, mg/cigt.
0.48	0.75	0.57	0.52	Smoke
2.1	4.1	2.6	2.2	Filler
1.4	2.0	1.4	0.9	Filter

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BLEND COMPONENTS
PERCENT BY WEIGHT

	Reconstituted Tobacco	Expanded Stems	Expanded Tobacco
PHILIP MORRIS			
Alpine KS,100; Alpine Lights KS,100	22	5	15
B & H 100 (plain & menthol) B & H Lights 100 (plain & menthol) B & H Multifilter KS (plain) Marlboro 80,KS,100 Marlboro Lights KS,100 Merit KS,100 (plain & menthol) Parliament Lights 80,KS,100 Saratoga 120 (plain & menthol) Va. Slims 100 (plain & menthol) Va. Slims Lights 100 (plain & men.) Va. Slims Lights 120 (plain & men.)	22	3	12
Merit Ultra Lights KS,100 (plain & men.)	22	None	21
Marlboro Menthol KS Marlboro Lights Menthol KS, 100 (Box)	22	None	15
B & H DeLuxe Ultra Lts. 100 (plain & men.) Va. Slims Ultra Lights 100 (plain & men.)	22	3	19
Commander 70 & KS (NF)	18	3	13
Cambridge Ultra Lights 100 Cambridge Lights KS & 100 (plain & men.) Cambridge Full Flavor KS & 100	22	3	15
Va. Slims SuperSlims 100 (plain & men.)	18	None	None
Bristol Lights KS,100 (plain & men.)	15	10	None
BROWN & WILLIAMSON			
Barclay KS,100	15	7	11
Kool Milds 80,KS Kool 80,KS,100 Kool Lights KS,100 Kool Ultra KS,100	13	10	11
Belair KS,100 Raleigh KS,100	11	14	12
Viceroy KS,100	12	7	11
Raleigh Lights KS, 100 Viceroy Lights KS, 100	16	5	None
Capri 100	19	None	None
Capri Menthol 100	11	None	None
LORILLARD			
Kent 80,KS,100 Kent Golden Lights KS,100 (plain & men.) Newport KS,100 Newport Lights KS,100 Newport Stripes 100 (plain & menthol) Old Gold KS Satin 100 (plain & menthol)	22	None	11
True KS,100 (plain & menthol)	20	None	14
Kent III KS,100	15	None	25

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BLEND COMPONENTS
PERCENT BY WEIGHT

	Reconstituted Tobacco	Expanded Stems	Expanded Tobacco
REYNOLDS			
Salem Ultra Lights KS	25	None	25
Doral Full Flavor KS,100 Doral Lights KS,100 Doral Ultra Lights KS,100	25	None	21
Doral Full Flavor Menthol KS,100 Doral Lights Menthol KS,100 Winston Ultra Lights KS,100 Salem Slim Lights 100 Vantage Ultra Lights KS,100 Salem Lights 100 (Box)	25	None	16
Camel KS Camel Lights KS,KS (Box) Magna KS,KS (Box) Magna Lites KS,KS (Box) More 120 (plain & menthol) More Lights 100 (plain & menthol) Salem KS,100 Salem Lights KS Salem Ultra Lights 100 Vantage KS,100 (plain & menthol) Winston KS (Box),100 Winston Lights KS,KS (Box)	25	None	12
Now KS,100 (plain & menthol)	15	None	51
Camel 70 (NF)	15	None	12
Camel Lights 100 Salem Lights 100 Winston KS (SP) Winston Lights KS (Box),100	25	None	7
AMERICAN			
Malibu Ultra Lights 100 Tareyton Lights KS	24	None	24
Carlton 80,KS,100 (plain & men.)	20	None	46
Carlton 120 (plain & menthol)	20	None	34
American Filters KS,100 American Lights KS,100 Lucky Strike KS Malibu KS,100 (plain & menthol) Malibu Lights KS,100	20	None	12
Pall Mall 100 Tareyton KS,100 Tareyton Long Lights 100	20	3	17
Lucky Strike 70 (NF) Pall Mall KS (NF)	20	3	11
LIGGETT			
Chesterfield Lights KS,100 Lark Lights KS,100 L & M KS,100 Pyramid Lights KS,100, Men. 100 Pyramid Ultra Lights 100 Savvy Lights 100 (plain & men.) Savvy Ultra Lights 100	15	5	23
Chesterfield KS (NF) Pyramid KS (NF)	10	5	19

MINOR BRANDS

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MINOR BRANDS

Brand	Cigt. Length, mm	FTC Tar, mg/cigt.	Nicotine, mg/cigt.	Puffs/ cigt.	CO, mg/cigt.
FILTER - PLAIN					
Now 80 (Box)	78.3	0.1	0.00	5.9	0.2
Kent Golden Lights 80 (Box)	79.4	7.8	0.68	6.7	9.2
Kent 80 (Box)	79.7	11.5	0.81	7.7	12.6
Camel 80 (Box)	79.0	15.9	1.14	7.9	15.2
Ultra Carlton 85 (Box)	82.9	0.1	0.00	6.2	0.2
Triumph 85	83.8	3.6	0.33	6.9	3.8
Old Gold Lights 85	83.8	8.1	0.73	6.9	9.5
Lucky Strike Lights 85	82.9	8.2	0.66	8.2	9.2
Century Lights 85 25's	82.8	8.2	0.70	7.8	9.7
PLAYERS LIGHTS 85 25'S	84.1	10.0	0.76	8.4	10.0
MARLBORO LIGHTS 85 25'S	84.2	10.3	0.78	8.5	11.4
Richland Lights 85 25's	84.2	11.5	0.89	8.1	11.5
PLAYERS 85 (BOX)	83.0	11.6	0.88	8.3	12.0
Lucky Strike 85 (Box)	82.8	13.4	1.04	8.3	13.6
Century 85 25's	83.3	14.2	1.00	7.3	16.6
B & H 85 (BOX)	84.2	14.4	1.25	9.2	11.4
Pall Mall 85	84.9	14.9	1.11	9.6	13.1
MARLBORO 85 25'S	84.1	15.9	1.14	9.3	14.9
Richland 85 25's	83.8	17.4	1.27	8.9	14.2
Triumph 100	98.7	5.2	0.46	8.1	6.7
Kent III 100 (Box)	98.8	5.4	0.47	8.2	7.0
Lucky Strike Lights 100	99.7	8.9	0.73	10.3	10.3
Pall Mall Lights 100	99.6	9.5	0.80	9.7	11.1
Kent Golden Lights 100 (Box)	98.9	9.5	0.85	9.0	9.6
Century Lights 100 25's	97.8	11.0	0.89	8.4	12.3
Silva Thins 100	98.5	11.6	0.97	9.5	11.2
PLAYERS LIGHTS 100 25'S	99.7	11.7	0.89	10.2	12.7
Satin 100	98.4	11.8	0.92	8.8	12.7
Richland Lights 100 25's	99.0	12.6	0.90	9.4	15.0
HI-LITE 100 (BOX)	98.6	12.8	1.08	10.9	13.1
Lucky Strike 100	99.8	12.9	1.03	10.6	12.0
PLAYERS 100 (BOX)	98.5	13.2	1.00	9.1	12.1
St. Moritz 100	99.2	13.2	1.06	8.5	14.3
Century 100 25's	97.7	15.1	1.11	8.2	16.5
MARLBORO 100 (BOX)	98.4	15.3	1.12	10.2	14.9
P.M. INTERNATIONAL 100 (BOX)	98.5	15.8	1.14	9.9	14.9
B & H (BOX)	98.5	16.2	1.15	10.2	15.3
Richland 100 25's	98.9	17.2	1.28	10.7	15.9
Old Gold 100	98.6	18.0	1.41	8.6	17.4
Eve Lights 120 (Box)	119.7	12.2	1.05	12.9	11.6
Max 120	119.5	15.6	1.20	9.9	14.8
Tall 120	119.5	17.6	1.47	14.8	17.4
FILTER - CHARCOAL					
Tareyton Lights 85	84.8	5.9	0.50	7.7	7.3
Lark 85	84.3	12.6	1.04	7.6	12.0
Lark 100	98.5	13.5	1.07	9.1	13.0

[1]Filter Type: CA = Cellulose Acetate, C = Carbon

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MINOR BRANDS

Total RTD, mm of H_2O	Ventilation, %	Circumference, mm	Permeability, ml/cm² x min.	Color	Tipping Paper Length, mm	Filter Length, mm	Filter Type[1]
103	93	24.9	41	White	32.0	27.6	CA
109	30	25.0	28	White	30.0	25.0	CA
135	19	24.9	40	White	25.0	21.0	CA
118	None	24.9	39	Cork	23.0	19.1	CA
111	97	25.0	116*	White	36.0	32.1	CA
102	62	24.9	30	Cork	32.0	24.9	CA/CA
132	33	25.0	35	Cork	32.0	24.9	CA
129	32	25.0	46	Cork	30.0	25.0	CA
132	35	24.2	24	Cork	30.0	23.1	CA
116	27	25.0	45	White	31.0	26.9	CA
116	26	25.0	36	White	31.0	27.0	CA
133	17	24.8	33	White	32.0	26.8	CA
109	22	25.0	22	Cork	32.0	27.0	CA
122	12	25.0	26	Cork	30.0	25.0	CA
141	None	24.1	26	Cork	27.0	23.0	CA
109	22	24.9	45	White	30.0	25.0	CA
112	16	24.9	50	Cork	24.0	20.0	CA
114	10	24.9	36	Cork	25.0	20.9	CA
117	8	24.8	24	Cork	26.0	21.1	CA
120	51	24.9	30	Cork	34.0	27.0	CA/CA
128	49	24.9	28	White	34.0	26.9	CA/CA
125	38	24.6	48	Cork	32.0	26.9	CA
136	28	24.5	47	White	36.0	26.7	CA
98	39	25.0	25	White	34.0	26.7	CA
122	26	24.1	25	Cork	35.0	31.0	CA
127	27	23.1	26	White	36.0	31.9	CA
119	29	25.0	28	White	36.0	31.5	CA
119	23	24.8	30	White	34.0	26.9	CA
143	17	24.9	45	White	36.0	26.9	CA
117	26	24.9	44	Cork	31.5	27.4	CA
116	26	24.5	48	Cork	32.0	26.8	CA
108	21	24.2	44	Cork	36.0	31.4	CA
116	None	25.0	101*	White	32.0	27.0	CA
142	None	24.2	25	Cork	35.0	31.0	CA
118	13	25.0	36	Cork	31.7	27.4	CA
113	14	24.9	35	Cork	32.0	27.5	CA
121	13	24.8	37	White	32.0	27.5	CA
126	13	24.8	25	Cork	32.0	26.9	CA
121	None	25.1	19	Cork	34.0	27.0	CA
110	54	21.1	11	White	35.0	29.8	CA
148	17	21.9	19	White	35.0	29.7	CA
142	35	22.3	15	White	35.0	29.7	CA
96	46	25.2	46	Cork	32.0	26.8	CA
115	None	24.8	173*	Cork	30.0	25.0	CA/C/CA**
121	None	24.7	167*	Cork	35.0	29.9	CA/C/CA**

*These cigarette papers are perforated
**Contains carbon.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MINOR BRANDS

Brand	Cigt. Length, mm	FTC Tar, mg/cigt.	Nicotine, mg/cigt.	Puffs/ cigt.	CO, mg/cigt.	Smoke Menthol, mg/cigt.
FILTER - MENTHOL						
Kool (NF)	69.9	20.2	1.30	6.5	12.3	0.66
Newport Lights 80 (Box)	79.1	7.9	0.66	6.9	9.0	0.28
Kool 80 (Box)	79.8	15.2	1.03	7.4	14.2	0.51
Newport 80 (Box)	79.6	15.8	1.12	7.4	15.2	0.43
Triumph Menthol 85	83.8	3.9	0.36	6.8	4.4	0.25
Kent Golden Lights 85	84.3	8.2	0.67	7.0	9.8	0.30
PLAYERS LIGHTS MEN. 85 25'S	83.8	9.6	0.75	8.4	10.2	0.54
PLAYERS MENTHOL 85 (BOX)	83.3	11.2	0.86	8.4	11.9	0.60
Richland Menthol 85 25's	83.4	14.9	0.97	7.1	14.3	0.50
Malibu Menthol 85	84.9	15.7	1.24	9.7	12.6	0.64
Newport 85 25's	84.1	16.0	1.16	8.1	16.1	0.46
Carlton Menthol 100 (Box)	98.3	1.6	0.15	8.9	1.4	0.24
Carlton Menthol 100	99.2	3.3	0.29	7.5	5.9	0.29
Triumph Menthol 100	98.6	5.6	0.47	8.1	7.2	0.35
Newport Lights 100 (Box)	99.2	8.6	0.76	9.0	8.8	0.34
Kent Golden Lights Men. 100	98.9	9.7	0.81	9.2	10.1	0.42
Satin Menthol 100	98.4	11.5	0.95	8.8	12.4	0.41
Silva Thins Menthol 100	98.2	11.8	0.97	9.8	10.5	0.42
PLAYERS LIGHTS MEN. 100 25'S	99.6	11.9	0.87	10.3	12.5	0.64
Kent Menthol 100	98.6	12.0	0.92	9.4	11.8	0.42
Kool Milds Menthol 100	98.9	12.2	0.90	8.9	11.4	0.44
PLAYERS MENTHOL 100 (BOX)	98.6	13.4	1.01	9.0	11.6	0.74
St. Moritz 100 Menthol	99.0	13.4	1.02	8.7	13.9	0.50
P.M. INTER. MEN. 100 (BOX)	98.4	16.0	1.17	10.3	15.3	0.69
B & H MENTHOL (BOX)	98.6	16.2	1.14	10.3	14.9	0.72
Newport 100 (Box)	99.2	17.1	1.27	8.6	17.8	0.47
Newport 100 25's	98.5	17.5	1.32	8.8	16.6	0.47
Spring Menthol 100	99.1	17.7	1.34	8.6	18.9	0.49
Eve Lights Menthol 120 (Box)	119.9	12.4	1.07	13.0	11.0	0.65
Max Menthol 120	119.6	15.6	1.22	10.0	16.0	0.51
Tall Menthol 120	119.7	17.1	1.50	15.4	15.0	0.70
NON-FILTER						
Chesterfield	68.8	16.7	1.07	6.6	9.8	-
COMMANDER REGULAR (NF)	69.9	20.2	1.34	7.5	10.5	-
PLAYERS (BOX)	70.2	23.1	1.63	8.4	12.1	-
Raleigh (NF)	83.8	22.6	1.33	8.4	13.0	-
Old Gold Straights	84.2	22.9	1.62	8.8	14.9	-
ENGLISH OVALS (BOX)	84.5	22.9	1.82	10.2	12.3	-
H. Tareyton	83.3	23.3	1.55	9.0	15.9	-

[1]Filter Type: CA = Cellulose Acetate, C = Carbon

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MINOR BRANDS

Total RTD, mm of H_2O	Ventilation, %	Circumference, mm	Permeability, ml/cm² x min.	Color	Tipping Paper Length, mm	Filter Length, mm	Filter Type[1]
63	None	24.9	24	Cork	11.0	-	-
132	33	24.9	29	Cork	30.0	24.9	CA
120	None	24.9	33	Cork	23.0	18.9	CA
118	None	24.9	19	Cork	25.0	21.0	CA
106	57	24.9	29	Cork	32.0	25.0	CA/CA
134	30	24.9	31	White	32.0	24.9	CA
116	26	24.9	47	White	31.0	27.0	CA
113	20	25.0	22	Cork	32.0	27.1	CA
117	None	24.9	27	Cork	26.0	21.1	CA
110	19	25.0	46	Cork	24.0	20.2	CA
121	None	24.9	19	Cork	25.0	21.0	CA
81	81	24.5	23	White	35.0	26.8	CA
109	63	24.4	29	White	32.0	26.7	CA
122	49	24.9	30	Cork	34.0	26.8	CA
98	44	24.9	30	Cork	34.0	26.9	CA
128	36	24.9	32	White	34.0	26.7	CA
119	27	24.8	29	White	34.0	26.8	CA
122	31	23.0	26	White	32.0	31.8	CA
124	29	24.9	28	White	36.0	31.5	CA
126	22	24.9	36	White	34.0	26.7	CA
123	22	24.8	23	Cork	36.0	29.2	CA
104	21	24.4	41	Cork	36.0	31.3	CA
111	None	25.0	173*	White	32.0	26.9	CA
118	14	24.9	32	Cork	32.0	27.5	CA
118	13	24.9	44	White	32.0	27.4	CA
126	None	24.9	19	Cork	34.0	26.9	CA
124	None	24.9	21	Cork	34.0	27.0	CA
120	None	25.0	18	Cork	34.0	26.9	CA
109	54	21.2	11	White	35.0	29.9	CA
148	18	21.9	19	White	35.0	29.7	CA
129	37	22.4	15	White	35.0	29.8	CA
72	-	24.9	47	-	-	-	-
57	-	25.0	24	-	-	-	-
91	-	24.9	26	-	-	-	-
73	-	24.9	23	-	-	-	-
80	-	25.0	20	-	-	-	-
111	-	25.1	42	-	-	-	-
89	-	25.0	26	-	-	-	-

*These cigarette papers are perforated.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

COUPON BRANDS

Two companies utilize coupons on their brands:

BROWN & WILLIAMSON[1]

Belair (85 & 100)
Raleigh Filter (85 & 100)
Raleigh Nonfilter (85)
Raleigh Lights (85 & 100)

LIGGETT GROUP

Chesterfield Nonfilter (70 & 85)
Chesterfield Filter 85

Philip Morris, American, Lorillard and Reynolds do not use coupons on any of their brands.

[1]These brands contain 2 coupons per pack and 8 coupons in the carton.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PLEASE NOTE

THE APPENDIX SECTION WHICH INCLUDES THE SUMMARY OF BRAND CHANGES, THE DESCRIPTION OF DATA REPORTED, AND EXPERIMENTAL PROCEDURES HAS BEEN UPDATED IN THIS REPORT.

PLEASE RETAIN THIS COPY FOR A REFERENCE AS THESE SECTIONS WILL NOT BE INCLUDED AGAIN UNTIL JANUARY, 1992. THIS WILL SAVE A CONSIDERABLE AMOUNT OF PAPER AND EFFORT BY NOT INCLUDING THE APPENDIX SECTION IN EACH MONTH'S REPORT.

THE SUMMARY OF COMPETITIVE BRAND CHANGES IS ARRANGED ALPHABETICALLY BY COMPANY. ALSO, THE BRANDS ARE LISTED ALPHABETICALLY FOR YOUR CONVENIENCE IN LOCATING A SPECIFIC BRAND.

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APPENDIX

SUMMARY OF COMPETITIVE BRAND CHANGES OBSERVED SINCE APRIL, 1960

A. AMERICAN BRANDS

AMERICAN BRAND 80

85 mm - Test marketed in soft pack (85 mm) - No unusual characteristics. 4/71

Discontinued.

AMERICAN BRAND 85

85 mm - Test marketed in soft pack (85 mm) - No unusual characteristics. 4/71

Discontinued.

AMERICAN FILTERS 85

Test marketed in Illinois - This value entry brand delivers 16 mg tar and 1.1 mg nicotine - packaged in a red pack. 5/89

AMERICAN FILTERS 100

Test marketed in Illinios - This value entry brand delivers 16 mg tar and 1.1 mg nicotine - packaged in a red pack. 5/89

AMERICAN LIGHTS 85

Test marketed in St. Louis, Missouri. Delivers 12 mg tar and 0.9 mg nicotine. This is a value entry product. 9/88

AMERICAN LIGHTS 100

Test marketed in St. Louis, Missouri. Delivers 11 mg tar and 0.9 mg nicotine. This is a value entry product. 9/88

Lower tobacco weight (0.865 to 0.826 g) correlated with lower tar (12 to 11 mg) and nicotine (1.0 to 0.9 mg) deliveries and lower puff count (10.6 to 9.8). Lower rod density was observed (0.257 to 0.246 g/cc). 7/90

AMERICAN LIGHTS 100 MENTHOL

Distributed in Virginia - delivers 11 mg tar, 0.9 mg nicotine and 0.6 mg smoke menthol - branded generic. 11/89

AMERICAN LIGHTS 120

Plain - Introduced 120 mm cigarette with a 40 mm CA filter and a tipping paper length of 45 mm - Tar (8 mg) lower than any 120 mm entry to date. 4/76
Discontinued .

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AMERICAN LIGHTS MENTHOL 120

Menthol - Introduced 120 mm cigarette with a 40 mm CA filter and a tipping paper length of 45 mm - Tar (9 mg) lower than any 120 mm entry to date. 4/76
Discontinued.

AMERICAN LONGS 120

Plain - Introduced 120 mm cigarette with a white cigarette paper - 30 mm CA filter - Tar (19 mg) and nicotine (1.5 mg) deliveries. 9/75

Discontinued.

AMERICAN LONGS MENTHOL 120

Menthol - Introduced 120 mm cigarette with a white cigarette paper - 30 mm CA filter - Tar (16 mg) and nicotine (1.3 mg) deliveries. 9/75

Discontinued.

AMERICAN OVALS 100

100 mm cigarette with 25 mm CA filter made like a normal cigarette and pressed into its oval shape. 6/69

Discontinued.

BERMUDA 85

Test marketed - king size - 20 mm CA filter, high TPM, low RTD. 5/65

Discontinued.

BRIGHTON 85

Test marketed - king size - dual filtered mentholated - similar to Montclair. 4/65

Discontinued.

BRIGHTON CONVERTIBLE MENTHOL 100

Same as Tennyson Menthol 100 - Introduced in test market. 4/68

Discontinued.

BRIGHTON PINCH MENTHOL 100

Similar to previously introduced Brighton Convertible Menthol 100 and Tennyson Menthol 100. 11/68

Discontinued.

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BULL DURHAM 85

Introduced - king size with larger circumference than normal cigarettes - 20 mm CA filter.	6/66

CARLTON 70

70 mm cigarette with 25 mm CA filter - Tar (0.7 mg), nicotine (0.15 mg). Data noted on pack "Tar" = 3 mg - Nicotine = 0.3 mg.	5/69
Increased filter ventilation, a more porous cigarette paper and a smaller circumference lowered tar to 1 mg and nicotine to 0.1 mg deliveries.	1/76
Expanded tobacco introduced at 35% level; reconstituted tobacco level decreased (25 to 18%).	9/76
Discontinued.	

CARLTON 85

Introduced - king size, dual filter with paper inner filter containing 3 mg of carbon - paper perforated immediately in front of tipping paper - TPM (8 mg), nicotine (0.5 mg) - Package label states: "Tar" = 2.5 mg, Nicotine = 0.4 mg.	1/64
TPM and nicotine reduced by changing to filter ventilation - Package label states: "Tar" = 2.7 mg, Nicotine = 0.3 mg.	5/64
TPM (3 mg) and nicotine (0.2 mg) increased - less efficient filter - Package label states: "Tar" = 3.9 mg and Nicotine = 0.4 mg.	10/64
TPM and nicotine deliveries increased by changing filter ventilation - "Tar" and nicotine data no longer stated on label.	1/65
TPM, nicotine and organic gas phase deliveries increased - Changes observed in total RTD, fiber denier and tobacco weight - Alkaloids increased slightly.	5/65
Total RTD decreased.	4/66
TPM and nicotine decreased - Filter efficiency increased as result of fiber denier changed.	5/66
"Tar" and nicotine data stated on package label. "Tar" = 9.5 mg and nicotine = 0.6 mg.	6/66
TPM and nicotine decreased, 3 mg and 0.1 mg by increasing ventilation. Data on pack changed - "Tar" = 9 mg and nicotine = 0.6 mg.	10/66
Data on pack changed - "Tar" = 7 mg and Nicotine = 0.5 mg.	4/67
Tar (2 mg) and nicotine (0.2 mg) decreased by increase in filter ventilation.	10/67

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CARLTON 85 (cont.)

Tar (1 mg) and nicotine (0.1 mg) increased by changes in fiber shape and fiber denier.	12/67
A model of Carlton with 25 mm CA filter introduced with tar of 2.0 mg.	2/69
Filter change from 20 mm dual filter to 25 mm CA filter.	7/69
Tar (4 to 1 mg) and nicotine (0.4 to 0.2 mg) reduced by increased filter ventilation and lowering tobacco weight - Expanded tobacco content increased from 0 to 42%.	3/76

CARLTON 85 (BOX)

Cigarettes packaged in a flip top box to replace the 70 mm Carlton cigarettes already on the market. Similar to Carlton 85 soft pack cigarettes. Tar (1 mg) and nicotine (0.1 mg) listed on pack.	1/77
Tar (<1.0 to <0.01 mg) and nicotine (0.1 to 0.002 mg) data listed on pack changed as indicated.	3/81
Ventilation was changed from four to six rows of laser perforation. Paper porosity changed from 14 to 7 sec. Both tar and nicotine deliveries of these cigarettes remains at 0.00 mg.	8/81
Name changed to Ultra Carlton.	7/88

CARLTON MENTHOL 85

Introduced - Mentholated version of Carlton 85 plain.	1/72
Tar (4 to 1 mg) and nicotine (0.4 to 0.1 mg) reduced by increased filter ventilation and lowering tobacco weight - Expanded tobacco content increased from 0 to 45%.	2/76
New package graphics.	7/88

CARLTON 100'S

National distribution - low tar (6 mg) and nicotine (0.5 mg) achieved by a 27 mm CA filter containing ventilation (52%). A low tobacco weight and rod density resulted from high ET content (35%). Tar (5 mg) and nicotine (0.5 mg) listed on pack.	4/77
Lower tar (5.9 to 4.4 mg) and nicotine (0.5 to 0.4 mg) deliveries resulted from a change to a more porous cigarette paper.	11/77
Lower tar (5 mg), nicotine (0.4 mg) and CO (5 mg) deliveries resulting from higher ventilation - lower total RTD.	1/86
New package graphics.	7/88

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CARLTON 100'S (cont.)

Higher ventilation (64 to 75%) and an increased level of paper component (1.0 to 1.3%) resulted in lower tar (3.5 to 2.5 mg) and nicotine (0.30 to 0.24 mg) deliveries. The data listed on the pack of this brand changed from 3 to 2 mg tar and 0.3 to 0.2 mg nicotine. 9/90

Tobacco weight increased (0.62 to 0.66 g); rod density increased (0.18 to 0.19 g/cc). No changes in smoke deliveries observed. 3/91

CARLTON 100 (BOX)

Introduced - Tar (0.8 mg) and nicotine (0.08 mg) - Ultra low delivery result of high filter ventilation (84%). 4/80

New package graphics. 7/88

Paper citrate increased (0.9 to 1.9%), permeability decreased (46 to 24 ml/cm^2 x min.), increased puff count (7.9 to 8.7 puff/cigt.). 3/91

CARLTON MENTHOL 100 (Box)

Introduced in Texas - Tar (1.0 mg) and nicotine (0.1 mg) - similar to Carlton 100 (Box). 1/82

National distribution. 7/85

New package graphics. 7/88

CARLTON MENTHOL 100

Introduced on test market - Low delivery (4 mg tar and 0.4 mg nicotine) mentholated cigarettes similar to Carlton 100 cigarettes previously introduced. Blend contains 33% ET. 11/77

New package graphics. 7/88

The data listed on the pack changed from 3 to 2 mg tar and 0.3 to 0.2 mg nicotine for this brand. 9/90

CARLTON SLIMS DELUXE 100 (BOX)

National distribution-delivers 7 mg tar and 0.6 mg nicotine. 1/84

CARLTON SLIMS DELUXE MENTHOL 100 (BOX)

National distribution-delivers 7 mg tar and 0.6 mg nicotine. 1/84

CARLTON 120

Introduced - test market - Tar (7.2 mg) and nicotine (0.61 mg). The blend contains 34% expanded tobacco - ventilation system consists of two rows of laser perforation. 7/81

New package graphics. 7/88

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CARLTON MENTHOL 120

Introduced - test market - Tar (6.4 mg) and nicotine (0.59 mg). The ventilation system consists of two rows of laser perforation.	8/81
Tar (5.9 to 7.4 mg), nicotine (0.57 to 0.77 mg), and CO (4.5 to 6.6 mg) increased - ventilation (37 to 28%) decreased.	11/82
New package graphics.	7/88

COLD HARBOR 85

Introduced - king size in soft pack - similar to Waterford with menthol added to filler.	6/66
Discontinued.	

COLONY FILTER 85

Introduced - One of the first American Tobacco brands with coupons - 20 mm CA filter.	9/66
Discontinued.	

COLONY MENTHOL 85

Introduced - One of the first American Tobacco brands with coupons - 20 mm CA filter.	9/66
Discontinued.	

COLONY FILTER 100

Introduced - 100 mm cigarette with 20 mm CA filter.	5/67
Discontinued.	

COLONY MENTHOL 100

Introduced - 100 mm cigarette with 20 mm CA filter.	5/67
Discontinued.	

COMPASS 85

Test marketed - king size mentholated - 20 mm CA filter.	6/65
Discontinued.	

DOUBLE EIGHT 88

Double Eight, 88 mm long, replaced Pall Mall 88 on the market - Packaged in a black and white striped pack.	7/68
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FIFTY-FIFTY 100

Introduced - 100 mm cigarette with 45 mm CA filter. 2/67

Tar (5 mg) and nicotine (0.2 mg) increased by changes in cigarette paper. 10/67

Discontinued.

FRESH CONVERTIBLES 100

Similar to Tennyson Convertible Menthol 100, plug-space-plug filter, with capsules containing menthol and carbon granules in space. 9/69

Discontinued.

H. TAREYTON 85 (NF)

Removed from C.I. tables. History of brand in C.I. 5/64. 11/63

Chloride type paper component used. 4/63

TPM and nicotine deliveries reduced. 6/63

TPM reduced by 4 mg as a result of changes in paper porosity, paper component and fiber denier. 3/64

HALF & HALF 85

Introduced - king size in soft pack with "pipe tobacco blend". 5/64

ICEBERG 10 MENTHOL 85

Low delivery (10 mg tar and 0.8 mg nicotine) with new Filtrona filter - Mentholated cigarette. Blend contains expanded tobacco (4%) and expanded RKS (3%). 5/72

Discontinued.

ICEBERG MENTHOL 100

Test marketed - 100 mm mentholated cigarette with a 30 mm "Filtrona-type" filter similar to the one used on Lucky Ten 100. Blend contains expanded tobacco and stems. 2/74

Cigarette re-engineered - Tar (10 to 5 mg) and nicotine (0.7 to 0.3 mg) decreased. Filtrona-type filter replaced by standard CA filter with 47% ventilation. 7/76

LTC 85

LTC (low tar cigarette) - similar to Lucky Ten in all characteristics. 8/71

Discontinued.

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LONG JOHNS 120

Introduced 120 mm cigarette with brown paper colored with azo dyes. Circumference 22.5 mm. Tar (20 mg) and nicotine (1.7 mg) deliveries. 5/75

Discontinued.

LONG JOHNS MENTHOL 120

Introduced 120 mm menthol cigarette with brown paper colored with azo dyes. Circumference 22.5 mm. Tar (17 mg) and nicotine (1.4 mg) deliveries. 5/75

Discontinued.

LUCKY 100'S

Introduced - Similar to previously marketed Lucky Ten 100 - 30 mm "Filtrona" filter. 6/74

Cigarette re-engineered - Tar (10 to 5 mg) and nicotine (0.8 to 0.4 mg) decreased. Filtrona-type filter replaced by standard CA filter with 47% ventilation. 7/76

Discontinued.

LUCKY FILTERS 100

Introduced - 100 mm cigarette with a 20 mm dual filter; 10 mm crimped tobacco with carbon and 10 mm CA filter. 3/67

Filter length (20 to 25 mm) increased, tar lower by 1 mg. 7/68

Name changed - Lucky Strike 100 to Lucky Filters 100. 8/68

Coupon added to pack. 6/69

Filter change from 25 mm dual filter to 25 mm CA filter, cigarette paper porosity change (12 to 21 seconds), tar (1 mg) and nicotine (0.1 mg) increased. 9/69

Reconstituted tobacco decreased (20 to 15%). 10/69

Discontinued.

LUCKY FILTERS (POLYMER) - 85

85 mm version of Lucky Filters, with a new polymer filter, was introduced. The twenty-five (25) mm filter consists of a CA-space-CA (10-5-10) with the space containing approximately 100 mg of polyethylene and alumina. 9/68

Discontinued.

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LUCKY FILTERS (POLYMER) - 100

100 mm version of Lucky Filters, with a new polymer filter, was introduced. The twenty-five (25) mm filter consists of a CA-space-CA (10-5-10) with the space containing approximately 100 mg of polyethylene and alumina.	9/68
Discontinued.	

LUCKY STRIKE 70 (NF)

Paper porosity and paper component increased - TPM reduced by 5 mg.	1/62
TPM increased by 2 mg.	7/62
TPM increased by 1 mg.	12/62
TPM decreased by 1.5 mg.	6/63
TPM decreased by 2 mg by changing paper component and porosity.	5/64
Reconstituted tobacco content increased (7 to 11%).	4/66
Circumference and tobacco weight decreased.	9/66
TPM and nicotine increased, 6 mg and 0.2 mg respectively, by changing paper component, citrate to phosphate, and decreasing paper porosity.	10/66
Reconstituted material increased 9 to 12%.	9/68
Reconstituted material increased 12 to 17%.	10/70
Expanded tobacco added to blend (4%).	1/72
Expanded tobacco increased 4 to 6%.	1/74
Lower tar (1 mg) and nicotine (0.1 mg) correlating with a lower filler rod TPM.	11/75
Tar delivery (27 to 25 mg) decreased by increase in paper porosity.	2/76

LUCKY STRIKE FILTER 80

Plain - Test marketed in a soft pack - First 80 mm cigarette in a soft pack in the U.S. - High tar (26 mg) and nicotine (1.6 mg) correlating with a low filtration efficiency.	12/75
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LUCKY STRIKE FILTER 85

Test marketed - king size triple filter (CA; carbon on CA; CA) - filter has gas phase activity.	8/64
Test marketed with 20 mm CA filter - high TPM.	11/64
TPM (2 mg) and nicotine (0.1 mg) decreased by increase in filter efficiency.	11/66
TPM (2 mg) and nicotine (0.1 mg) decreased by increase in paper porosity.	12/66
TPM reduced by a filter change from single CA to dual filter - Dual filter consisted of inner filter made from crimped tobacco sheet with embedded carbon and an outer CA filter.	9/67
Change from 20 mm dual filter to 20 mm CA filter.	8/69
Reconstituted tobacco increase (14 to 18%).	4/70
Tar (3 mg) and nicotine (0.3 mg) increased as result of blend change.	5/70
Discontinued.	12/71

LUCKY STRIKE 85

Introduced - test market - delivers 11.6 mg tar and 0.94 mg nicotine. The cigarette length is 83 mm. American Brands has no other 85 mm cigarette in the 10-12 mg tar category.	11/81
Expanded stems removed and reconstituted tobacco increased (20%) in blend - no changes in smoke deliveries.	5/86
Generic prices in Arkansas, Louisiana, Mississippi, and Tennessee; sub-generic in Iowa.	5/91

LUCKY STRIKE 85 (BOX)

Introduced - test market - delivers 11.2 mg tar and 0.88 mg nicotine. The ventilation consists of one row of laser perforation. The cigarette length is 83 mm. American Brands has no other 85 mm cigarette in the 10-12 mg tar category.	11/81
Tar (12 to 13 mg), nicotine (0.9 to 1.0 mg) and CO (12 to 14 mg) deliveries increased as a result of lower ventilation (19 to 14%).	9/89
Generic prices in Arkansas, Louisiana, Mississippi, and Tennessee; sub-generic in Iowa.	5/91

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

Lorillard
Heritage Lights 85 and 100

Lorillard is test marketing **Heritage Lights 85 and 100** cigarettes in Louisville, Kentucky; Portland, Oregon; and Maine. A $4.00 off coupon is attached to the carton. These cigarettes are similar to Marlboro Lights in tar and nicotine deliveries.

	Heritage Lights 85	Marlboro Lights 85	Heritage Lights 100	Marlboro Lights 100
Smoke				
Butt Length, mm	35	34	37	39
FTC Tar, mg/cigt.	10.5	10.7	10.3	10.8
Nicotine, mg/cigt.	0.84	0.82	0.83	0.87
Puffs/cigt.	8.0	8.3	9.3	10.4
Filtration Eff., %	52	56	55	59
Filler Rod TPM, mg/cigt.	29.4	31.8	27.9	30.5
CO, mg/cigt.	12.4	10.7	12.4	11.3
Cigarette				
Total RTD, mm of H_2O	133	119	149	122
Static Burn. Time, min.	8.0	7.9	7.2	7.9
Length, mm	84.3	84.1	99.3	99.5
Circumference, mm	24.9	24.9	24.8	25.0
Paper				
Components				
Type	Cit.	Cit.	Cit.	Cit.
Percent	0.7	0.6	2.0	0.6
Permeability, ml/cm^2 x min.	18	32	29	43
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	87	97	107	108
Length, mm	24.9	27.0	27.1	31.4
Weight, g	0.15	0.17	0.17	0.19
Fiber denier/shape	3.0/Y	3.0/Y	3.0/Y	2.8/Y
Tipping paper length, mm	32	31	34	36
Color	White	White	White	White
Ventilation, %	19	22	23	30
Type/Rows of Holes	MM/4	L/2	L/4	L/2
Filler				
Total alkaloids, % (DWB)	2.15	2.07	2.17	2.16
Total red. sugars, % (DWB)	6.1	7.4	6.4	7.9
Wt. of tob., g (12.5% O.V.)	0.709	0.684	0.847	0.811
Rod Density, g/cc	0.243	0.242	0.239	0.240
Reconstituted Tob., %	22	22	22	22
E.S., %	None	3	None	3
Expanded Tob., %	11	12	11	12

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MA6 Malibu 85 : Category : 22 CIRVW Run : Aug 7 1991 1:02PM

TEST.....	AVERAGE...	19910501	19910401	19910301	19910201	19910101	19901201	19901101	19901001			
SALES	0.14				0.14			0.15*	0.11*	0.08/9007*		
BUTT_LEN	27.0#											
TAR	15.8	16.1	16.3	15.7		15.3	17.1	15.7				
TPM	19.4#	19.8	20.0	18.9		18.9	21.4	19.4				
NIC	1.22	1.24	1.27	1.18		1.18	1.24	1.19				
H2O	2.34#	2.39	2.52	2.05		2.40	3.13	2.50				
PUFF_CT	9.2	8.9	9.2	9.0		9.8	9.6	9.3				
FLT_EFF	41									41/8906		
FLR_RTPM	31.1									31.1/8906		
FTC_CO	14.4						14.5	15.2		12.8/9001	14.9/8911	
TOT_RTD	98	98	101	97		95	104	109				
STAT_BURN	8.1									8.1/8906		
CIG_LEN	84.7			84.9						84.6/8907	84.7/8906	84.7/8901
CIRC	25.0									24.9/8907	25.0/8906	25.0/8901
PCOMP_TYPE	Cit.									Cit./8906		
PAP_CIT	0.8									0.8/8906		
PORO	12#									12/8901		
CPORO	51	53	54			44				51/9004		
FLT_TYPE	CA									CA/8906		
FLT_RTD	58	58	55	60		58	56	61				
FLT_LEN	20.2									20.3/8907	20.1/8906	20.1/8901
FLT_WT	0.14									0.14/8906		
FLT_TA	7.9#									7.9/9004		
FIB_SHP	4.5/Y									4.5/Y/8906		
TIPP_PLEN	24.0									24.0/8906		
TIPP_PCOL	CORK*					CORK*				Cork/8906		
VENT_PER	16	14	14	16		27?	18	17				
VENT_TYPE	L#					L*						
VENT_ROWS	1#					1*						
EQ_OV	13.0#			12.9			12.8	13.1		13.3/8912		
CFLR_ALKS	2.02			2.08			1.94	2.01		2.04/8912		
CFLR_SUGS	7.8			8.5			7.3	7.6*		9.7/8912		
FLR_PG	0.8#									0.8/9004		
FLR_GLY	1.8#									1.8/9004		
RECON_MAT	20		20							20/9006*	20/8911*	
EXP_STEMS	NONE		NONE							None/9006*	None/8911*	
EXP_TOB	12		12							12/9006*	12/8911*	
CTOB_WT	0.834									0.834/8906		
ROD_LEN	64.6											
CDENS	0.260									0.258/8906		
DIAM	7.9#									7.9/8907	8.0/8901	

==MA6==

* - BARRIER ? - EXCLUSION # - NOT REPORTED == - NOT APPLICABLE

2055655252

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MI6 Malibu Lights 85 : Category : 22 CIRVW Run : Aug 7 1991 1:03PM

TEST.....	AVERAGE...	19910501	19910401	19910301	19910201	19910101	19901101	19901001	19900701		
SALES	0.17				0.17		0.19*	0.14*	0.10*		
BUTT_LEN	33.0#										
TAR	9.5	9.4		9.7			9.0	9.6			
TPM	11.1#	11.1		11.5			10.7	11.3			
NIC	0.79	0.80		0.77			0.74	0.83			
H2O	0.90#	0.87		0.95			0.93	0.87			
PUFF_CT	8.1	8.4		8.0			7.8	8.0			
FLT_EFF	50							51	49/8906		
FLR_RTPM	28.6							28.6	28.5/8906		
FTC_CO	9.0						10.7	7.9	9.1/9001	8.3/8911	
NO	0.17#							0.17			
HCN	0.09#							0.09			
RCHO	0.51#							0.51			
TOT_RTD	107	105		113			109	102			
STAT_BURN	7.3							7.2	7.3/8906		
CIG_LEN	82.7			82.7				82.3	82.7/8907	82.9/8906	
CIRC	25.0							25.0	24.9/8907	25.0/8906	25.0/8901
PCOMP_TYPE	Cit.								Cit./8906		
PAP_CIT	0.7							0.6	0.8/8906		
PORO	12#								12/8901		
CPORO	44	44						47	42/9001	41/8909	
FLT_TYPE	CA								CA/8906		
FLT_RTD	90	86		93			90	90			
FLT_LEN	24.9							24.9	24.9/8907	24.8/8906	24.9/8901
FLT_WT	0.18							0.18	0.18/8906		
FLT_TA	7.6#							7.2	8.0/9004		
FIB_SHP	4.0/Y								4.0/Y/8906		
TIPP_PLEN	30.0								30.0/8906		
TIPP_PCOL	WHITE*					WHITE*			White/8906		
VENT_PER	33	37		29			33	34			
VENT_TYPE	L#					L*					
VENT_ROWS	1#					1*					
EQ_OV	12.9#			13.3			13.0	12.4	12.9/9003		
CFLR_ALKS	1.99			1.95			1.98	2.01	2.00/9003		
CFLR_SUGS	7.1			7.4			6.3	7.2	7.5/9003		
FLR_PG	0.6#							0.7	0.6/9004		
FLR_GLY	1.6#							1.6	1.7/9004		
RECON_MAT	20		20						20/9006*	20/8911*	
EXP_STEMS	NONE		NONE						None/9006*	None/8911*	
EXP_TOB	12		12						12/9006*	12/8911*	
TOB_WT	0.678#							0.678			
CTOB_WT	0.683							0.678	0.689/8906		
ROD_LEN	57.8										
DENS	0.238#							0.238			
CDENS	0.238							0.238	.238/8906		
DIAM	7.9#							8.0	7.9/8907	7.9/8901	

==MI6==========

* - BARRIER ? - EXCLUSION # - NOT REPORTED ==== - NOT APPLICABLE

2055656253

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MCL6 Montclair Lights/: Category : -99 CIRVW
...WARNING...Sample MCL6 will not be on report

TEST..... AVERAGE... 19910401

BUTT_LEN	33.0#	33.0							
TAR	12.1	12.1							
TPM	14.3#	14.3							
NIC	0.92	0.92							
H2O	1.31#	1.31							
PUFF_CT	8.2	8.2							
FLT_EFF	51	51							
FLR_RTPM	32.7	32.7							
FTC_CO	11.4	11.4							
NO	0.23#	0.23							
HCN	0.15#	0.15							
RCHO	0.71#	0.71							
TOT_RTD	125	125							
STAT_BURN	7.7	7.7							
CIG_LEN	82.7	82.7							
CIRC	25.0	25.0							
PAP_CIT	0.8	0.8							
CPORO	24	24							
FLT_RTD	87	87							
FLT_LEN	24.9	24.9							
FLT_WT	0.17	0.17							
FLT_TA	2.7#	2.7							
FIB_SHP	3.5/Y	3.5/Y							
TIPP_PLEN	30.0	30.0							
TIPP_PCOL	WHITE	WHITE							
VENT_PER	21	21							
VENT_TYPE	L#	L							
VENT_ROWS	1#	1							
EQ_OV	13.0#	13.0							
PACK_OV	11.6#	11.6							
CFLR_ALKS	2.14	2.14							
CFLR_SUGS	7.2	7.2							
FLR_PG	0.7#	0.7							
FLR_GLY	1.7#	1.7							
RECON_MAT	27	27							
EXP_STEMS	0	0							
EXP_TOB	15	15							
CTOB_WT	0.689	0.689							
ROD_LEN	57.8								
DENS	0.241#	0.241							
CDENS	0.240								
DIAM	8.0#	7.9							
CV	5.2#	5.2							

==MCL6==

* - BARRIER ? - EXCLUSION # - NOT REPORTED ==== - NOT APPLICABLE

2055656254

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MN6 Montclair
Category : -99 Manuf : AB Price Tier : - CIRVW Run : Aug 23 1991 8:30AM
...WARNING...Sample MN6 will not be on report

TEST.....	AVERAGE...	19910701	19910501	19910401					
BUTT_LEN	27.0#			27.0					
TAR	15.9	15.6		16.1					
TPM	19.9#	19.7		20.1					
NIC	1.21	1.23		1.19					
H2O	2.84#	2.88		2.79					
PUFF_CT	9.1	8.9		9.2					
FLT_EFF	41			41					
FLR_RTPM	29.7			29.7					
FTC_CO	14.2			14.2					
NO	0.28#			0.28					
HCN	0.19#			0.19					
RCHO	0.83#			0.83					
TOT_RTD	107	108		106					
STAT_BURN	7.4			7.4					
CIG_LEN	84.8	85.1		84.4					
CIRC	25.0	25.1		24.9					
PCOMP_TYPE	CIT		CIT						
PAP_CIT	0.8			0.8					
CPORO	52	50		54					
FLT_TYPE	CA		CA						
FLT_RTD	57	55		58					
FLT_LEN	19.9	19.8		19.9					
FLT_WT	0.13			0.13					
FLT_TA	1.8#			1.8					
FIB_SHP	3.5/Y			3.5/Y					
TIPP_PLEN	24.0			24.0					
TIPP_PCOL	CORK			CORK					
VENT_PER	14	15		13					
VENT_TYPE	L#			L					
VENT_ROWS	1#			1					
EQ_OV	13.1#			13.1					
PACK_OV	12.3#			12.3					
CFLR_ALKS	2.19			2.19					
CFLR_SUGS	8.3			8.3					
FLR_PG	0.8#			0.8					
FLR_GLY	1.7#			1.7					
RECON_MAT	25			25					
EXP_STEMS	0			0					
EXP_TOB	14			14					
CTOB_WT	0.774			0.774					
ROD_LEN	64.9								
DENS	0.243#			0.243					
CDENS	0.240								
DIAM	8.0#	8.0		7.9					
CV	4.9#			4.9					

==MN6==========
* - BARRIER ? - EXCLUSION # - NOT REPORTED === - NOT APPLICABLE

2055656255

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Cambridge Full Flavor	American Filters	Vicerov	Pyramid 85 (NF)
[1]Sales	1.61	0.27	2.91	0.64
Smoke				
FTC Tar, mg/cigt.	16.4	16.5	16.7	20.7
Nicotine, mg/cigt.	1.08	1.28	1.20	1.24
Puffs/cigt.	8.5	9.4	8.8	9.1
Filtration Eff., %	46	40	46	-
Filler Rod TPM, mg/cigt.	30.3	28.3	34.4	27.6
CO, mg/cigt.	14.4	14.7	14.0	11.8
Cigarette				
Total RTD, mm of H_2O	121	107	118	83
Static Burn. Time, min.	7.8	7.9	8.1	7.4
Length, mm	83.9	84.9	83.9	83.7
Circumference, mm	24.9	24.9	24.9	25.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.5	0.9	0.5	0.8
Permeability, ml/cm^2 x min.	42	49	22	47
Filter				
Type	CA	CA	CA	-
RTD, mm of H_2O	71	59	76	-
Length, mm	20.9	19.9	21.0	-
Weight, g	0.12	0.13	0.12	-
Fiber denier/shape	2.8/Y	4.5/Y	3.9/Y	-
Tipping Paper Length, mm	25.0	24.0	26.0	-
Tipping Paper Color	Cork	Cork	Cork	-
Ventilation, %	None	12	10	-
Filler				
Total alkaloids, % (DWB)	1.89	1.98	1.96	1.87
Total red. sugars, % (DWB)	7.8	7.8	6.5	9.3
Reconstituted Tob., %	22	20	12	10
Expanded Stems, %	3	None	7	5
Expanded Tob., %	15	12	11	19
Wt. of Tob., g (12.5% OV)	0.736	0.804	0.730	0.947
Rod Length, mm	63.0	65.0	62.9	83.7
Rod Density, g/cc	0.237	0.251	0.235	0.229

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656256

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

85 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Viceroy Lights	American Lights	Cambridge Lights	Magna Lites
[1]Sales	0.65	0.40	2.02	0.49
Smoke				
FTC Tar, mg/cigt.	11.9	12.0	12.3	12.8
Nicotine, mg/cigt.	0.90	0.95	0.83	0.92
Puffs/cigt.	8.4	8.4	8.3	8.0
Filtration Eff., %	58	50	50	56
Filler Rod TPM, mg/cigt.	31.3	31.9	33.6	34.8
CO, mg/cigt.	11.7	11.6	11.9	12.5
Cigarette				
Total RTD, mm of H_2O	131	116	106	115
Static Burn. Time, min.	7.9	8.2	8.1	8.6
Length, mm	83.6	82.9	84.1	84.0
Circumference, mm	24.9	25.0	24.9	25.0
Paper				
Component Type	Cit.	Cit.	Cit.	Cit.
Component Percent	0.8	0.7	0.5	0.5
Permeability, ml/cm^2 x min.	31	27	26	24
Filter				
Type	CA	CA	CA	CA
RTD, mm of H_2O	103	86	84	84
Length, mm	26.9	25.0	27.0	26.9
Weight, g	0.17	0.17	0.17	0.16
Fiber denier/shape	2.5/Y	3.8/Y	3.8/Y	2.3/Y
Tipping Paper				
Length, mm	32.0	30.0	31.0	31.0
Tipping Paper Color	Cork	White	Cork	White
Ventilation, %	20	22	23	16
Filler				
Total alkaloids, % (DWB)	2.12	2.03	1.90	1.95
Total red. sugars, % (DWB)	6.2	7.8	7.6	6.9
Reconstituted Tob., %	16	20	22	25
Expanded Stems, %	5	None	3	None
Expanded Tob., %	None	12	15	12
Wt. of Tob., g (12.5% OV)	0.717	0.701	0.666	0.663
Rod Length, mm	56.7	57.9	57.0	57.1
Rod Density, g/cc	0.256	0.244	0.237	0.234

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656257

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

	Viceroy Lights	American Lights	Doral Full Flavor
[1]Sales	0.71	0.70	3.20
Smoke			
FTC Tar, mg/cigt.	12.3	12.5	15.8
Nicotine, mg/cigt.	0.93	1.00	1.20
Puffs/cigt.	9.6	10.2	8.5
Filtration Eff., %	57	51	54
Filler Rod TPM, mg/cigt.	30.6	26.9	30.1
CO, mg/cigt.	13.2	11.8	16.6
Cigarette			
Total RTD, mm of H_2O	131	121	132
Static Burn. Time, min.	7.5	7.3	7.0
Length, mm	98.7	99.6	98.6
Circumference, mm	24.9	24.1	24.8
Paper			
Component Type	Cit.	Cit.	Cit.
Component Percent	1.0	0.9	0.4
Permeability, ml/cm^2 x min.	45	50	24
Filter			
Type	CA	CA	CA
RTD, mm of H_2O	100	88	80
Length, mm	29.9	26.8	30.8
Weight, g	0.18	0.17	0.18
Fiber denier/shape	2.9/Y	3.8/Y	3.5/Y
Tipping Paper			
Length, mm	36.0	32.0	35.0
Tipping Paper Color	Cork	White	Cork
Ventilation, %	20	26	None
Filler			
Total alkaloids, % (DWB)	1.97	1.99	2.25
Total red. sugars, % (DWB)	6.9	7.7	7.3
Reconstituted Tob., %	16	20	25
Expanded Stems, %	5	None	None
Expanded Tob., %	None	12	21
Wt. of Tob., g (12.5% OV)	0.850	0.831	0.719
Rod Length, mm	68.8	72.8	67.8
Rod Density, g/cc	0.250	0.247	0.217

[1]Year-end sales in billions of cigarettes - Maxwell Report - February, 1991.

2055656258

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

100 MM BRANDED GENERICS
(Brands Ranked by FTC Tar, left to right)

Malibu	Cambridge Full Flavor	American Filters	Viceroy	
0.40	2.05	0.41	1.56	[1]Sales
				Smoke
16.3	16.5	16.8	17.4	FTC Tar, mg/cigt.
1.24	1.08	1.27	1.20	Nicotine, mg/cigt.
9.8	8.4	10.0	10.2	Puffs/cigt.
46	48	46	52	Filtration Eff., %
26.5	28.0	24.5	33.2	Filler Rod TPM, mg/cigt.
14.8	16.3	16.1	15.4	CO, mg/cigt.
				Cigarette
112	107	126	122	Total RTD, mm of H_2O
7.4	7.1	7.7	7.9	Static Burn. Time, min.
99.8	99.6	99.9	98.8	Length, mm
24.5	24.9	24.5	24.9	Circumference, mm
				Paper
Cit.	Cit.	Cit.	Cit.	Component Type
1.0	1.6	0.8	0.5	Component Percent
46	45	25	24	Permeability, ml/cm² x min.
				Filter
CA	CA	CA	CA	Type
64	62	66	80	RTD, mm of H_2O
26.8	31.4	26.7	26.8	Length, mm
0.15	0.18	0.16	0.16	Weight, g
6.6/Y	4.4/Y	4.5/Y	3.0/Y	Fiber denier/shape
				Tipping Paper
32.0	36.0	32.0	32.0	Length, mm
Cork	Cork	Cork	Cork	Tipping Paper Color
11	None	8	14	Ventilation, %
				Filler
2.01	1.88	2.05	1.89	Total alkaloids, % (DWB)
8.1	7.7	8.5	6.6	Total red. sugars, % (DWB)
20	22	20	12	Reconstituted Tob., %
None	3	None	7	Expanded Stems, %
12	15	12	11	Expanded Tob., %
0.841	0.790	0.841	0.833	Wt. of Tob., g (12.5% OV)
73.0	68.2	73.1	72.0	Rod Length, mm
0.242	0.235	0.241	0.235	Rod Density, g/cc

ES-ET BRANDS
2055656259
Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LUCKY STRIKE MENTHOL 85

Introduced - 85 mm mentholated cigarette with 20 mm CA filter.	6/66
Discontinued.	12/68
Re-introduced nationally - delivers 11 mg tar, 0.8 mg nicotine and 0.6 mg smoke menthol.	5/86
Generic prices in Arkansas, Louisiana, Mississippi, and Tennessee; sub-generic in Iowa.	5/91

LUCKY STRIKE 100

Introduced in February 1984 delivers 11 mg tar and 1 mg nicotine.	3/84
Generic prices in Arkansas, Louisiana, Mississippi, and Tennessee; sub-generic in Iowa.	5/91

LUCKY STRIKE MENTHOL 100

Introduced - 100 mm mentholated cigarette with 20 mm CA filter.	4/67
TPM (2 mg) and nicotine (0.2 mg) decreased by changing to a more porous paper.	5/67
Filter length (20 to 25 mm) increased, tar lower (1 mg).	7/68
Discontinued.	12/68
Reintroduced-delivers 10 mg tar, 0.8 mg nicotine and 0.8 mg smoke menthol-24 mm circumference.	11/85
National	3/86
Generic prices in Arkansas, Louisiana, Mississippi, and Tennessee; sub-generic in Iowa.	5/91

LUCKY STRIKE LIGHTS 85

Introduced - deliveries 7 mg tar - has the shortest cigarette length of any king size cigarette in a soft pack.	11/83

LUCKY STRIKE LIGHTS 100

Introduced - delivers 9 mg tar.	11/83

LUCKY TEN 85

Low delivery (10 mg tar and 0.8 mg nicotine) with new Filtrona filter - Blend contains expanded tobacco (5%).	8/71
A decrease in tar (9 to 8 mg) resulting from a change in filters from a 25 mm Filtrona-type filter to a 25 mm standard CA filter containing ventilation (35%). Lower total RTD noted.	4/77

2055656260

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LUCKY TEN 85 (cont.)

Discontinued. 12/77

LUCKY TEN 100

Test marketed - 30 mm Filtrona filter with triangular openings at each end and constricted in the middle. 5% expanded tobacco. Tar (9 mg) and nicotine (0.9 mg) listed on pack. 4/73

Discontinued. 12/77

MALIBU 85

National distribution - delivers 17 mg tar and 1.2 mg nicotine. 9/88

MALIBU MENTHOL 85

National distribution - delivers 16 mg tar, 1.2 mg nicotine, and 0.7 mg smoke menthol. 9/88

MALIBU LIGHTS 85

National distribution - delivers 9 mg tar and 0.7 mg nicotine. 9/88

MALIBU 100

Test marketed in New Hampshire, Peoria and Spokane - first value entry - delivers 11 mg tar and 1 mg nicotine. 3/87

MALIBU MENTHOL 100

Test marketed in New Hampshire, Peoria and Spokane - first value entry - delivers 11 mg tar, 1 mg nicotine and 0.6 mg smoke menthol. 3/87

MALIBU LIGHTS 100

Test marketed in New Hampshire, Peoria and Spokane - first value entry - delivers 9 mg tar and 0.8 mg nicotine. 3/87

MALIBU ULTRA LIGHTS 100

Distributed nationally as a branded generic - delivers 6 mg tar and 0.5 mg nicotine - packaged in a yellow pack. 9/89

MARYLAND 100

100 mm cigarette with 100% air-cured tobacco - No RKS or reconstituted material. 3/70

Discontinued. 12/71

2055656261

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MARYLAND MENTHOL 100

100 mm mentholated cigarette with 100% air-cured tobacco - Contains no reconstituted material or RKS. 10/70

Discontinued. 12/71

MERMAID MENTHOL 100

Test marketed - 25 mm CA filter - Blend contains RKS which has been processed to give an expanded appearance. 11/71

Discontinued.

MISTY LIGHTS 100 (BOX)

Test marketed in California and Louisiana - delivers 8 mg tar and 0.7 mg nicotine - will sell for the full price in California and will sell for the generic price in Louisiana. 9/89

MISTY LIGHTS 100 MENTHOL (BOX)

Test marketed in California and Louisiana - delivers 8 mg tar, 0.7 mg nicotine and 0.5 mg smoke menthol - will sell for the full price in California and for the generic price in Louisiana. 9/89

MONTCLAIR 85

Introduced - mentholated dual filter, carbon section - released menthol, which is concentrated there, as TPM is picked up - has no gas phase activity. 3/62

TPM, nicotine, and menthol deliveries increased. 8/62
Paper component identified as chloride type. 4/63

TPM and nicotine deliveries increased by changing filter ventilation - "Tar" and nicotine data no longer stated on label. 1/64

TPM reduced 7 mg as result of a new filter and filter ventilation - Package label states: "Tar" = 5.2 mg, Nicotine = 0.5 mg. 5/64

TPM reduced 5 mg. Nicotine delivery also decreased, RTD increased. TPM reduced 4 mg by changing paper component and porosity. 6/64

Carbon type changed, coconut to coal. 10/64

TPM (4 mg) and nicotine (0.2 mg) increased, less efficient filter - Package label states: "Tar" = 6.9 mg, Nicotine = 0.7 mg. 11/64

Menthol content and delivery increased. 8/65

Menthol content and delivery increased. 7/66

2055656262

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MONTCLAIR 85 (cont.)

TPM (2 mg) decreased by increasing filter ventilation.	5/67
TPM (4 mg) and nicotine (0.2 mg) decreased by changes in filter ventilation, filter efficiency, and paper porosity.	6/67
Coupon added to pack.	9/67
Circumference decreased (25.2 to 24.9 mm); lower tobacco weight noted.	12/68
Reconstituted tobacco content increased (20 to 36%).	4/69
Change from 20 mm dual filter to 20 mm CA filter.	8/69
Reconstituted tobacco decreased (36 to 28%).	10/69
Tar (6 mg) and nicotine (0.5 mg) increased by elimination of filter ventilation, change to less porous paper. Reconstituted tobacco decreased (28 to 19%).	4/70
Reconstituted tobacco increased (19 to 25%).	9/71
Expanded tobacco added to blend (3%) - Higher filler menthol and menthol delivery noted.	2/73
Expanded stems added to blend (12%) and reconstituted material decreased from 17 to 8% - No change in smoke deliveries.	3/73
Expanded tobacco removed from blend. Tar (1 mg) and nicotine (0.1 mg) decreased - Alkaloids and sugars lower.	2/75
Discontinued.	12/75
Nationally distributed - delivers 16 mg tar and 1.2 mg nicotine, sell at sub-generic prices.	5/91

MONTCLAIR LIGHTS 85

Nationally distributed - delivers 12 mg tar and 0.9 mg nicotine, sell at sub-generic prices.	5/91

MONTCLAIR LIGHTS MENTHOL 85

Nationally distributed - delivers 12 mg tar, 0.9 mg nicotine and 0.6 mg smoke menthol; sell at sub-generic prices.	5/91

PALL MALL 85 (NF)

Paper porosity and RTD increased; TPM and nicotine deliveries reduced (3 mg and 0.1 mg).	4/63
Nicotine delivery reduced slightly.	6/63

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PALL MALL 85 (NF) (cont.)

TPM and nicotine reduction, 6 mg and 0.2 mg respectively, by changing paper component, phosphate to citrate, and increasing paper porosity.	1/64
TPM and nicotine increased, 7 mg and 0.3 mg respectively, by changing paper component, citrate to phosphate, and decreasing paper porosity.	10/66
Reconstituted material increased, 9 to 12%.	4/67
TPM (6 mg) and nicotine (0.2 mg) decreased by changing paper additive and increasing paper porosity.	5/67
Expanded tobacco added to blend (2%).	1/73

PALL MALL 85 (NF) 25'S

Expanded tobacco increased from 2 to 6%.	1/74
Expanded stems added to blend (3%).	9/75
Lower tar (1 mg) and nicotine (0.1 mg) correlating with a lower filler rod TPM.	11/75
Lower tar (25 to 23 mg) and nicotine (1.5 to 1.4 mg) deliveries resulting from a change to a more porous cigarette paper.	6/79
Cigarette length (84.8 to 83.7 mm) decreased.	8/82
Test marketed in Rhode Island - contains 25 cigarettes per pack - similar to Pall Mall 85 (NF) - 200 cigarettes per carton - cigarettes packed in an 8-9-8 configuration in the pack.	5/85
National Distribution.	5/86

PALL MALL "UNFILTERED" LIGHTS 85 (SP)

Test market - Rhode Island - delivers 14 mg tar, 1 mg nicotine and has a tobacco filter with porous plugwrap and two rows of laser perforation. The tobacco filter blend (24% reconstituted tobacco, 11% expanded stems and 39% expanded tobacco) is different from the blend of the tobacco column.	9/86

PALL MALL 88

Pall Mall cigarettes, 88 mm long, introduced in white pack with gold lettering.	5/68
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PALL MALL 100

Plain - Test marketed in new air tight hermetically sealed "polyfoil pak."	10/74
Freon expanded tobacco has been added at the 9% level resulting in a lower tobacco weight (0.905 to 0.865 g).	7/81
Ventilation was incorporated (11%) resulting in lower tar (16 to 15 mg), nicotine (1.2 to 1.1 mg) and CO (16 to 13 mg) deliveries.	7/89
Ventilation removed resulting in higher tar (15 to 17 mg), nicotine (1.1 to 1.2 mg) and CO (14 to 15 mg) deliveries.	11/89
Tar (17 to 15 mg), nicotine (1.2 to 1.1 mg) and CO (15 to 13 mg) deliveries decreased as a result of ventilation (none to 9%). A lower tobacco weight (0.883 to 0.834 g) and rod density (0.254 to 0.239 g/cc) resulted from an increase in expanded tobacco (11 to 17%).	3/90
Name changed to Pall Mall Gold 100 - new package graphics introduced.	5/90

PALL MALL MENTHOL 100

Menthol - Test marketed in new air tight hermetically sealed "polyfoil pak."	10/74
Discontinued.	

PALL MALL EXTRA MILD 80

Low delivery (9 mg tar and 0.7 mg nicotine) with new Filtrona molded filter - Blend contains expanded tobacco (4%) - Similar to Lucky Ten 85 in most characteristics.	7/72
Discontinued.	12/77

PALL MALL EXTRA LIGHT 85

85 mm cigarette similar to 80 mm version previously introduced in 7/72.	8/72
Tar (6 mg) and nicotine (0.7 mg) decreased - Filtrona filter with no ventilation was replaced by a standard CA filter with 45% ventilation. Tobacco weight and rod density were higher as result of elimination of ET from blend.	6/76
Brand name changed from Pall Mall Extra Mild 85 to Pall Mall Extra Light 85. No changes in smoking or physical characteristics. Tar delivery listed on pack as "7 mg or Less".	4/78

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PALL MALL FILTER 80 (BOX)

Test marketed in hard box (80 mm) - Tar (19 mg) and nicotine (1.2 mg) deliveries. 5/71

Reintroduced - plain - test marketed in a red flip top box similar in color and design to the soft pack used for Pall Mall 85 Nonfilter cigarettes - High tar (24 mg) and nicotine (1.5 mg) deliveries correlating with a low filtration efficiency. 12/75

Discontinued.

PALL MALL FILTER 85

Test marketed in soft pack (85 mm) - Tar (20 mg) and nicotine (1.3 mg) deliveries. 5/71
Reintroduced - plain - test marketed in a red soft pack similar to that used for Pall Mall 85 Nonfilter cigarettes - Filter RTD extremely low resulting in a low filtration efficiency - Tar (25 mg) and nicotine (1.6 mg) deliveries. 10/75

Tar (25 to 18 mg) and nicotine (1.6 to 1.2 mg) decreased as result of a longer (17 to 20 mm), more efficient filter. 12/76

PALL MALL FILTER LIGHTS 85

The incorporation of ventilation (14%) and a change to a more porous cigarette paper resulted in lower tar (16 to 13 mg), nicotine (1.2 to 1.0 mg) and CO (16 to 12 mg) deliveries. The pack has been modified by adding a blue banner to the design. 11/86

PALL MALL FILTER 95

Introduced - 95 mm long cigarette in gold crush-proof box with hinge top - 15 mm CA filter. 3/66

Tar (6 mg) and nicotine (0.3 mg) reduced by increasing filter length (15 to 25 mm) and tipping paper (21 to 30 mm). 2/68

Brand discontinued - Replaced with 100 mm size in crush-proof box. 3/71

Discontinued.

PALL MALL FILTER MENTHOL 95

Introduced - 95 mm long in new type package - mentholated - 15 mm CA filter. 11/65

Tipping paper increased (19 to 21 mm). 7/67

Tar (6 mg) and nicotine (0.2 mg) reduced - single package comprised of twin crush-proof boxes - one box contains ten mentholated and the other ten non-mentholated cigarettes. 2/68

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PALL MALL FILTER 100

Test marketed - 100 mm long - Same as Pall Mall nonfilter with 15 mm CA filter.	10/64
TPM (5 mg) and nicotine (0.2 mg) decreased by an increase in filter efficiency.	11/66
Tipping paper increased 19 to 21 mm.	2/67
Reconstituted material increased 9 to 12%.	4/67
TPM (3 mg) decreased by increasing filter length (17 to 20 mm) and by increasing paper porosity.	5/67
Tar (2 mg) and nicotine (0.3 mg) reduced by increases in filter length (20 to 25 mm) and tipping paper (24 to 30 mm).	10/67
Circumference decreased (24.7 to 24.4 mm) and tobacco weight decreased, no change in tar or nicotine.	11/68
Tar (1 mg) and nicotine (0.1 mg) reduced by an increase in filter efficiency - High total and filter RTD noted.	10/70
Filter length (25 to 27 mm) and tipping paper (30 to 32 mm) increased - No change in smoke deliveries.	3/74
Addition of 3% ES to blend.	4/75
Discontinued.	
Introduced in Atlanta, Georgia - delivers 14 mg tar and 1 mg nicotine - packaged in a red pack with a blue banner.	5/87

PALL MALL FILTER MENTHOL 100

Introduced - 100 mm mentholated cigarette with 15 mm CA filter.	10/66
Tipping paper increased (19 to 21 mm).	2/67
TPM (2 mg) decreased by increasing filter length (17 to 20 mm) and by increasing paper porosity.	5/67
Tar (2 mg) and nicotine (0.3 mg) reduced by increases in filter length (20 to 25 mm) and tipping paper (24 to 30 mm).	10/67
Tar (1 mg) and nicotine (0.1 mg) reduced by a blend change.	3/68
Circumference decreased (24.9 to 24.6 mm) and tobacco weight decreased, no change in tar and nicotine.	11/68
Tar (1 mg) and nicotine (0.1 mg) increased by changes in blend and heavier tobacco weight; smoke and filler menthol decreased.	10/69
Reconstituted tobacco decreased (22 to 17%).	10/69

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PALL MALL FILTER MENTHOL 100 (cont.)

Reconstituted tobacco increased (16 to 21%).	10/70
Addition of expanded RKS (11%) and expanded tobacco (3%) to blend - Reconstituted tobacco content reduced (21 to 7%). Alkaloids increased and fiber shape changed from X to Y - shape. Total and filter RTD increased.	5/72
Expanded tobacco removed from blend. Tar (1 mg) and nicotine (0.1 mg) decreased. Alkaloids and sugars lower.	2/75
Discontinued.	

PALL MALL FILTER 100 (BOX)

Plain - This new 100 mm cigarette in a crush-proof box replaces the previously marketed Pall Mall 95 cigarettes in a flat twin pack.	4/71
Discontinued.	

PALL MALL FILTER MENTHOL 100 (BOX)

Menthol - This new 100 mm cigarette in a crush-proof box replaces the previously marketed Pall Mall 95 cigarettes in a flat twin pack.	4/71
Discontinued.	

PALL MALL LIGHTS 100'S

Introduced - 100 mm low tar (12 mg) and nicotine (1.0 mg) brand characterized by 27 mm filter with 24% ventilation. Blend contains 8% expanded tobacco and 2% expanded stems.	7/78
Tar (10.6 to 8.1 mg), nicotine (0.94 to 0.74 mg) and CO (10.3 to 7.6 mg) reduced - increase in filter ventilation (28 to 47%) decrease in filter RTD (4.6 to 3.6).	2/81
Tar (8.4 to 10.9 mg), nicotine (0.8 to 1.0 mg) and CO (8 to 10 mg) increased due to reduced ventilation (53 to 36%) - total RTD increased (3.2 to 4.2).	7/83
CO (10 to 12 mg) delivery increased due to decreased filter ventilation (37 to 23%) - higher filter RTD (3.0 to 4.2 in. H20) correlated with higher efficiency (48 to 54%).	1/84
Tar (10.3 to 9.3 mg) and CO (12.1 to 10.4 mg) decreased - ventilation increased (22 to 28%).	9/84

PALL MALL LIGHT MENTHOL 100'S

Introduced - 13 mg tar and 1.1 mg nicotine - Blend contains 12% expanded tobacco and 12% expanded stems. Cigarette has mechanically perforated cigarette paper and no ventilation.	4/79

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PINNACLE 85

New 85 mm cigarette with 25 mm geometrically shaped filter similar to that on Vantage (RJR); however, filter is reversed. 9/70

Discontinued.

PINNACLE MENTHOL 85

Test marketed - king size - dual filtered mentholated - tobacco blend markedly different. 4/65

Discontinued.

SAFARI 100

Test marketed - 100 mm cigarette with 25 mm CA filter. New type package - pouch pack with fin seals. 1/73
Discontinued.

SILVA THINS 100

100 mm cigarette with 20 mm CA filter; small circumference (22 mm) and 26% reconstituted material. 9/67

Reconstituted tobacco decreased (26 to 13%) and paper porosity increased - No change in smoke deliveries. 5/68

Blend changed as indicated by higher alkaloids and a markedly lower reducing sugar - The nicotine delivery (0.1 mg) was increased by this change. 7/70

Expanded stem added to blend at 10% level and reconstituted tobacco content reduced 18 to 11% - Filter changed from 20 mm paper to 25 mm CA. Lower tobacco weight and rod density noted. Tar decreased (2 mg). 2/72

Expanded stem content increased (10 to 16%). 3/73

Lower tar (16 to 12 mg) and nicotine (1.2 to 1.1 mg) deliveries resulting from introduction of filter ventilation (30%). Increases in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) were also noted. 8/77

The addition of 4% ET - ES increased from 8 to 16% resulting in a lower tobacco weight. 5/82

Tar (11 to 12 mg) and CO (10 to 11 mg) increased as a result of lower ventilation (30 to 20 %). 11/85

SILVA THINS 100 (BOX)

Test marketed - delivers 10 mg tar, 0.8 mg nicotine and has longer filter, longer tipping paper length, larger circumference and less porous cigarette paper than the Soft Pack. 3/86

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

SILVA THINS MENTHOL 100

100 mm cigarette with small circumference - Similar to Silva Thins Plain in all characteristics except for menthol.	8/68
Blend changed as indicated by higher alkaloids and lower reducing sugars. Filler rod TPM increased (2 mg) and tar delivery increased (1 mg).	9/71
Filter length increased 20 to 25 mm - No change in smoke deliveries.	5/74
Lower tar (15 to 12 mg) and nicotine (1.1 to 1.0 mg) deliveries resulting from introduction of filter ventilation (30%). Increases in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) were also noted. Introduced expanded stem at 3% level.	8/77
Lower tar (12 to 7 mg) and nicotine (1.0 to 0.8 mg) deliveries correlating with a more efficient filter and a lower filler rod TPM.	5/79
Tar (7 to 11 mg) and nicotine (0.8 to 1.0 mg) increased by a decrease in filter ventilation.	8/79
Changed the filter from 27 mm paper to 27 mm CA - Tar (11 to 12 mg) and nicotine (0.9 to 1.1 mg) increased as result of less efficient filter.	5/80
The addition of 4% ET - ES increased from 8 to 16% resulting in a lower tobacco weight.	5/82
Tar (11 to 12 mg) and CO (10 to 11 mg) increased as a result of lower ventilation (30 to 20%)-higher smoke menthol delivery (0.4 to 0.5 mg).	11/85

SILVA THINS MENTHOL 100 (BOX)

Test marketed - delivers 10 mg tar, 0.8 mg nicotine and 0.4 mg smoke menthol and has a longer filter, longer tipping paper length, larger circumference and less porous cigarette paper than the Soft Pack.	3/86

SUPER M MENTHOL 100

Test marketed - 100 mm mentholated cigarette in new air tight hermetically sealed "polyfoil pak" - Same pack as used on Safari 100.	5/74
Discontinued.	

SWEET CAPORAL 85

Introduced - king size with 20 mm CA filter.	10/65
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TALL 120

Plain - Introduced 120 mm cigarette with 30 mm CA filter - White stripped cigarette paper - Tar (19 mg) and nicotine (1.4 mg) deliveries.	8/75
Tar (18 to 21 mg), nicotine (1.6 to 1.7 mg), and CO (20 to 21 mg) increased - ventilation reduced (36 to 30%).	9/83
Lower tar (19 to 17 mg), nicotine (1.6 to 1.5 mg) and CO (19 to 17 mg) deliveries resulted from an increased filter ventilation (36 to 45%). A lower puff count (15 to 14) and a lower total RTD (133 to 108 mm) were also observed.	9/89

TALL MENTHOL 120

Menthol - Introduced 120 mm cigarette with 30 mm CA filter - White striped cigarette paper - Tar (19 mg) and nicotine (1.4 mg) deliveries.	8/75
Tar (18 to 20 mg), nicotine (1.6 to 1.7 mg), and CO (17 to 21 mg) increased - ventilation decreased (38 to 31%).	9/83

TAREYTON 85

Paper component now being used, identified as chloride type.	4/63
TPM reduced by 3 mg - Nicotine delivery decreased by 0.1 mg. Total and filter RTD increased.	6/63
TPM and nicotine reduced (4 mg and 0.1 mg) - Change in paper component and porosity.	2/64
Fiber shape changed, I to cloverleaf.	8/64
Fiber denier changed, 5.0 to 4.0.	11/64
Fiber shape changed, cloverleaf to I.	5/65
Reconstituted tobacco content increased (10 to 14%).	10/65
Tipping paper increased 19 to 24 mm, paper porosity increased - TPM unchanged.	2/67
TPM (1 mg) decreased as result of change in filter length - Paper porosity decreased 14 to 20 seconds.	4/67
Reconstituted tobacco decreased 20 to 15%.	10/69
Addition of 3% ES to blend.	4/75
Tar decreased (19 to 17 mg) resulting from a change to a more porous cigarette paper.	7/76

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TAREYTON 85

Freon expanded tobacco introduced to the blend at the 9% level resulting in a lower tobacco weight. Change resulted in lower tar (16 to 14 mg) and nicotine (1.2 to 1.0 mg) deliveries. 8/78

Lower tar (15 to 13 mg) correlating with a higher RTD for the inner paper filter. 5/79

TAREYTON LIGHTS 85

Test marketed - an 85 mm low tar (8 mg) and nicotine (0.6 mg) cigarette. 27 mm dual filter with filter ventilation (44%) consisting of 17 mm CA outer filter and 10 mm paper inner filter. Inner filter contains carbon granules. Longest filter of any 85 mm cigarette on the market. 1/77

Tar (7 to 4 mg) and nicotine (0.7 to 0.3 mg) decreased resulting from an increase in filter ventilation and lower tobacco weight. Lower tobacco weight result of the addition of expanded tobacco (32%). 2/80

Tar (5 to 6 mg), nicotine (0.4 to 0.5 mg) and CO (5 to 6 mg) increased as a result of decreased ventilation (53 to 41%). 11/86

Blend change from 20 to 24% reconstituted tobacco, 41% to 24% expanded tobacco and 3 to 0% expanded stems; tobacco weight increased (0.586 to 0.667 g) and rod density increased (0.203 to 0.227 g/cc). A higher puff count (7.2 to 8.3) and static burning time (6.0 to 7.3 min.) correlated with these changes; paper component decreased (1.3 to 0.5%). 11/90

TAREYTON MENTHOL 85

Introduced on test market - Low delivery (7 mg tar and 0.6 mg nicotine), mentholated brand similar in most characteristics to Tareyton Lights 85 previously introduced. Contains no charcoal in filter. 9/77

Discontinued.

TAREYTON 100

Introduced - 100 mm 20 mm dual filter. 4/67

TPM (2 mg) decreased as result of changing paper porosity. 5/67

Tar (2 mg) and nicotine (0.2 mg) reduced by increases in filter length (20 to 25 mm) and tipping paper (24 to 30 mm). 10/67
Filter length (20 to 25 mm) increased, no changes in smoke deliveries. 9/68

Tar (2 mg) and nicotine (0.1 mg) increased correlating with a reduction in filter efficiency. 11/70

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TAREYTON 100 (cont.)

Tar (2 mg) increased - Higher filler rod TPM and puff count. 12/71

Filter length (25 to 27 mm) and tipping paper (30 to 32 mm) increased. Lower tar (1 mg) noted. 10/73

Addition of 3% ES to blend. 4/75

Tar (19 to 17 mg) and nicotine (1.4 to 1.3 mg) decreased resulting from a change to a more porous cigarette paper. 7/76

Lower tar (17 to 15 mg) and nicotine (1.3 to 1.2 mg) deliveries resulting from decrease in filler rod TPM delivery. 5/78

Freon expanded tobacco introduced to the blend at the 9% level resulting in a lower tobacco weight. Change resulted in lower tar (15 to 13 mg) and nicotine (1.2 to 1.0 mg) deliveries. 8/78

TAREYTON LONG LIGHTS 100

Introduced - 100 mm low tar (8 mg) and nicotine (0.7 mg) cigarette. 27 mm dual filter with filter ventilation (37%) consisting of 17 mm CA outer filter and 10 mm paper inner filter. Inner filter contains carbon granules. Blend contains 7% expanded tobacco. 1/78

Tar (9 to 7 mg) and nicotine (0.8 to 0.7 mg) decreased resulting from an increase in filter ventilation (30 to 47%). 8/79

TAREYTON ULTRA LOW TAR MENTHOL 85

Test marketed - These new cigarettes deliver 2 mg tar and 0.1 mg nicotine - 25 mm CA filter with 75% ventilation and blend containing 34% expanded tobacco. 3/79

Discontinued.

TENNYSON MENTHOL 85

Introduced - king size mentholated - carbon portion of dual filter has no gas phase activity. 10/65

Discontinued.

TENNYSON MENTHOL 100

100 mm mentholated cigarette - menthol contained in gelatin capsules which release menthol when filter is pinched - similar filter to that in Waterford. 10/67

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TWIST 100

Test marketed - 100 mm cigarette with lemon and menthol flavoring. Blend contains 10% expanded stems. 6/73

Discontinued. 12/75

ULTRA CARLTON

Name changed from Carlton 85 (Box) - new package graphics. 7/88

WATERFORD 80

Introduced - long size in crush proof box - novel filter containing two types of capsules in addition to charcoal - One of the capsule types contains water. 9/65

Discontinued. 12/66

WATERFORD 85

Introduced - king size in soft pack - novel filter contains only one type capsule containing water - Charcoal also present. 2/66

Discontinued.

WHITE LEAF 85

Test marketed - 85 mm filter cigarette with bleached all tobacco wrapper instead of cigarette paper. 6/67

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

B. BROWN AND WILLIAMSON TOBACCO COMPANY

ARCTIC LIGHTS 85

Test marketed - 85 mm cigarette delivering 9 mg tar and 0.7 mg nicotine. High alkaloid blend containing 14% expanded stems - 25 mm CA filter with 33% ventilation. 9/78

Discontinued.

ARCTIC LIGHTS 100

Test marketed - 100 mm cigarette delivering 10 mg tar and 0.8 mg nicotine. High alkaloid blend containing 14% expanded stems - 27 mm CA filter with 39% ventilation. 9/78

Discontinued.

AVALON 85

Introduced - test market - king size, triple filter, in soft pack. 7/63

Discontinued. 12/64

BARCLAY 80 (BOX)

Test marketed - ultra low tar (3.2 mg) - 27 mm CA filter containing 64% ventilation-blend contains 11% reconstituted tobacco, 18% expanded tobacco and 11% expanded stems. 10/80

Tar (3.0 to 1.3 mg), nicotine (0.17 to 0.08 mg) and CO (3.0 to 1.2 mg) reduced as result of increase in filter ventilation (66 to 84%) - rows of (MP) holes increased (2 to 3) - elimination of reconstituted tobacco, expanded stems - increase in expanded tobacco (17 to 36%) - lower tobacco weight (0.582 to 0.520 g) - increase in total alkaloids (1.71 to 2.67%). 2/81

Reconstituted tobacco (19%) and expanded stems (5%) added to blend - expanded tobacco decreased (32 to 10%) - tobacco weight (0.533 to 0.628 g) and rod density (0.203 to 0.240 g/cc) increased. 1/85

BARCLAY ULTRA LIGHTS 80 (BOX)

Introduced in Wichita, Kansas - delivers 1 mg tar and 0.1 mg nicotine - utilizes the same filter as the Barclay 80 - similar to Barclay 80 in most characteristics. 11/84

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BARCLAY 83 (BOX)

Marketed in Kentucky-smoke deliveries (2 mg tar, 0.2 mg nicotine) are similar to deliveries of Barclay 80 (Box). Product utilizes 27 mm actron filter. 9/90

BARCLAY 85

Test marketed - ultra low tar (2.5 mg) - 27 mm CA filter with 77% filter ventilation-blend contains 32% expanded tobacco and no reconstituted tobacco or expanded stems. 9/80

Reconstituted tobacco (19%) and expanded stems (5%) added to blend - expanded tobacco decreased (32 to 10%) - tobacco weight (0.550 to 0.678 g) and rod density (0.194 to 0.240 g/cc) increased. 1/85

Test marketed version of Barclay 85 with three rows of micro-mechanical perforation and one row of Hauni laser perforation and an Actron filter (manufactured by American Filtrona) that uses cellulose acetate as the plugwrap. 1/86

National distribution with filter design introduced in January, 1986. 5/86

BARCLAY MENTHOL 85

Introduced - nationally - 85 mm mentholated cigarette. Tar (1.4 mg) and nicotine (0.11 mg) - filter ventilation is achieved by a system of mechanical perforation and four longitudinal grooves along the filter. These cigarettes are similar in most characteristics to Barclay 85. 7/81

Uses cellulose acetate film as the plugwrap - filter manufactured by American Filtrona 9/85

Discontinued. 7/87

BARCLAY ULTRA LIGHTS 85

Introduced in Wichita, Kansas - delivers 1 mg tar and 0.1 mg nicotine - utilizes the same filter as the Barclay 85 - similar to Barclay 85 in most characteristics. 11/84

Discontinued.

BARCLAY 100

Test marketed - ultra low tar (3.5 mg) - 27 mm CA filter with 69% filter ventilation - blend contains 26% expanded tobacco, 6% reconstituted tobacco and 12% expanded stems. 9/80

Introduced nationally. 7/81

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BARCLAY 100 (cont.)

Decreased the amount of expanded tobacco (25 to 12%) and increased the amount of reconstituted material (7 to 17%) - increased tobacco weight and rod density.	7/85
Tar (3 to 5 mg) nicotine (0.3 to 0.4 mg) and CO (2 to 3 mg) increased - lower ventilation (76 to 69%).	11/85
Test marketed version of Barclay 100 with two rows of micro-mechanical perforation and one row of Hauni laser perforation and an Actron filter (manufactured by American Filtrona) that uses cellulose acetate as the plugwrap.	1/86
National distribution with filter design introduced in January, 1986.	5/86

BARCLAY MENTHOL 100

Introduced - nationally - 100 mm mentholated cigarette. Tar (3.4 mg) and nicotine (0.28 mg) - filter ventilation is achieved by a system of mechanical perforation and four longitudinal grooves along the filter. These cigarettes are similar in most characteristics to Barclay 100.	7/81
Uses cellulose acetate film as the plugwrap - filter manufactured by American Filtrona.	9/85
Discontinued.	7/87

BARCLAY LIGHTS ULTRA THINS 100 (BOX)

Test market - Atlanta, Georgia - delivers 9 mg tar, 0.7 mg nicotine - 17 mm circumference.	11/87

BARCLAY LIGHTS ULTRA THINS MENTHOL 100 (BOX)

Test market - Atlanta Georgia - delivers 9 mg tar, 0.7 mg nicotine, and 0.7 mg smoke menthol - 17 mm circumference.	11/87

BARCLAY ULTRA LIGHTS 100

Introduced in Wichita, Kansas - delivers 4 mg tar and 0.4 mg nicotine - utilizes the same filter as the Barclay 100 - similar to Barclay 100 in most characteristics.	11/84
Discontinued.	

BELAIR 85

Introduced - king size recessed filter, mentholated.	6/60
Lighter filter.	6/62

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BELAIR 85 (cont.)

Flush-type filter.	6/62
TPM reduced, and paper porosity increased - Carbowax (5%) observed in the filter.	12/63
Filler alkaloids increased resulting in higher nicotine delivery.	1/64
Change in paper component, phosphate to citrate.	3/64
TPM reduced (2 mg).	8/64
Filler change reduced nicotine delivery by reducing total alkaloids.	9/64
Fiber shape changed from cloverleaf to X-shape.	3/66
TPM (1 mg) increased.	5/66
TPM (4 mg), nicotine (0.2 mg), and menthol in smoke (0.1 mg) decreased as result of change in paper porosity.	1/67
TPM (2 mg) decreased as result of blend change.	8/67
Tar (2 mg) reduced by increase in filter efficiency; fiber shape changed X to Y-shape.	3/68
Tar (1 mg), nicotine (0.2 mg), and menthol (0.5 mg) deliveries were reduced by changes in filter length (20 to 21 mm) and tipping paper (24 to 25 mm).	7/68
Reconstituted tobacco (7 to 11%) and RKS (12 to 16%) increased.	4/70
Addition of expanded RKS to blend replacing portion of regular RKS.	2/72
Lower total alkaloids (0.2%) and nicotine delivery (0.2 mg).	5/73
Tipping paper length increased 25 to 26 mm - No other changes.	7/73
Menthol in smoke content increased by increasing filler menthol.	3/76
Filler alkaloids and total reducing sugars were lower. Nicotine delivery reduced by 0.1 mg.	5/76
Lower tar delivery (15 to 13 mg) resulting from a change to a more porous, mechanically perforated cigarette paper.	8/77

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BELAIR 85 (cont.)

Lower tar (13 to 12 mg) due to decrease in filler rod TPM delivery.	5/78
The addition of expanded tobacco at the 6% level was observed. This change resulted in lower tobacco weight and rod density and an increase in total RTD. 10/78 Lower tar (12 to 8 mg) and nicotine (0.9 to 0.8 mg) deliveries resulting from the introduction of filter ventilation (26%) and an increase in tipping paper length.	1/79
Tar (9 to 10 mg), nicotine (0.76 to 0.82 mg) and filler rod TPM (26.3 to 29.8 mg) increased resulting from less porous paper (7 to 15 sec.) with lower level of paper component (0.6 to 0.2%) - decreased total and filter RTD.	1/84
Increased filter and tipping lengths - lower tobacco weight resulted - no changes in smoke deliveries.	9/87
Test marketed in Illinios as a branded generic. This cigarette is packaged in a green and white pack and delivers 15 mg tar, 1.2 mg nicotine and 0.6 mg smoke menthol.	3/89

BELAIR 100

100 mm cigarette with 25 mm CA filter - Similar to Kool 100.	9/68
Coupon added to pack.	9/69
RKS decreased (17 to 13%).	10/69
Filter fiber shape changed - X-shape to Y-shape.	8/71
Addition of expanded RKS to blend replacing portion of regular RKS.	2/72
Change in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) - Tar (2 mg) and nicotine (0.1 mg) decreased.	12/72
Lower total alkaloids (0.1%) and nicotine delivery (0.1 mg).	5/73
Menthol in smoke content increased by increasing filler men.	3/76
Lower tar delivery (16 to 14 mg) resulting from a change to a more porous, mechanically perforated cigarette paper.	8/77
Lower tar (14 to 13 mg) due to decrease in filler rod TPM delivery. Lower tobacco weight and rod density were also noted.	5/78

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

BELAIR 100 (cont.)

The addition of expanded tobacco at the 6% level was observed. This change resulted in lower tobacco weight and rod density and an increase in total RTD.	10/78
Lower tar (13 to 8 mg) and nicotine (1.0 to 0.7 mg) deliveries resulting from the introduction of filter ventilation (33%) and an increase in tipping paper length (32 to 36 mm). A change to a less porous paper (7 to 12 seconds) and the removal of expanded tobacco in the blend was noted.	1/79
Addition of 10% expanded tobacco resulted in a lower tobacco weight and rod density. Tar (7 to 8 mg) and CO (10 to 11 mg) increased as a result of a decrease in filter ventilation (37 to 24%).	11/80
Expanded tobacco eliminated (10 to 0%) - increase in tobacco weight.	3/81
Tar (10.2 to 8.8 mg), nicotine (0.81 to 0.74) and CO (12.0 to 10.2 mg) decreased - increased ventilation (25 to 34%).	9/82
Tar (9.2 to 7.5 mg), nicotine (0.67 to 0.58 mg), CO (8.0 to 6.6 mg) and menthol (0.38 to 0.32 mg) decreased - increased ventilation (36 to 45%).	5/84
Test marketed in Illinois as a branded generic. This cigarette is packaged in a green and white pack and delivers 15 mg tar, 1.2 mg nicotine and 0.6 mg smoke menthol.	3/89

BELAIR LIGHTS 85

Test marketed in Illinois as a branded generic. This cigarette delivers 10 mg tar, 0.9 mg nicotine and 0.5 mg smoke menthol.	3/89

BELAIR LIGHTS 100

Test marketed in Illinois as a branded generic. This cigarette delivers 10 mg tar, 0.9 mg nicotine and 0.5 mg smoke menthol.	3/89

BREEZE 85

Introduced - test market - king size mentholated, in soft pack - similar to Kool.	5/63
Discontinued.	

CAPRI 100 (BOX)

Test marketed in Louisiana - delivers 9 mg tar and 0.7 mg nicotine - has a 17 mm circumference.	1/87

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAPRI 100 MENTHOL (BOX)

Test marketed in Louisiana - delivers 9 mg tar, 0.7 mg nicotine and 0.7 mg smoke menthol - has a 17 mm circumference. 1/87

CAPRI LONGS 100

100 mm mentholated cigarette with 22 mm CA filter - Lower smoke menthol than Kool 100. 9/67

Filter length (22 to 25 mm) and tipping paper length (27 to 30 mm) increased - Paper porosity changed (21 to 10 seconds) - No change in tar. 11/68

Discontinued. 12/79

CAPRI 110

Introduced a new 110 mm cigarette 24.7 mm in circumference. Tar (19 mg) and nicotine (1.5 mg); 30 mm CA filter; 35 mm tipping paper. 3/75

Discontinued. 12/75

CAPRI MENTHOL 110

Introduced a new 110 mm menthol cigarette 24.7 mm in circumference. Tar (19 mg) and nicotine (1.5 mg); 30 mm CA filter; 35 mm tipping paper. 5/75

Discontinued. 12/75

CAPRI 120 (BOX)

Test marketed in New Orleans, LA - delivers 13 mg tar and 0.9 mg nicotine - has a 17 mm circumference. 11/88

CAPRI MENTHOL 120 (BOX)

Test marketed in New Orleans, LA - delivers 12 mg tar, 0.8 mg nicotine and 1 mg smoke menthol - has a 17 mm circumference. 11/88

CHEVRON 85

Introduced - test market - king size filter, in soft pack - similar to Viceroy. 3/63

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CORONET 85 (NF)

Introduced - king size, nonfilter in new aluminum foil wrapper - similar to Raleigh plain end. 10/62

Discontinued.

DOVER LONGS 100

Introduced - 100 mm cigarette with 22 mm CA filter. 2/67

Tar (4 mg) and nicotine (0.4 mg) reduced by changes in the filter and in the blend. 11/67

Discontinued. 12/68

ELI CUTTER 70 (NF)

Introduced in Sacremento, CA and Denver, CO - delivers 21 mg tar and 1.3 mg nicotine - packed in a black pack. 11/84

Discontinued

ELI CUTTER 80 (BOX)

Introduced in Sacremento, CA and Denver, CO - delivers 15 mg tar and 1 mg nicotine - packed in a black pack - micro-mechanical ventilation system. 11/84

Discontinued.

ELI CUTTER 85

Introduced in Sacramento, CA and Denver, CO - delivers 15 mg tar and 1 mg nicotine - packed in a black pack - micro-mechanical ventilation system. 11/84

Re-introduced in a red package in Oklahoma - delivers 16 mg tar, 1.1 mg nicotine. 9/86

ELI CUTTER LIGHTS 85

Test marketed in Oklahoma - packaged in a beige pack. This cigarette delivers 11 mg tar and 0.9 mg nicotine. This brand contains a new type of reconstituted tobacco that is a cast sheet material containing diammonium phosphate. 9/86

FACT 85

Test marketed - CA filter with a pocket in the middle containing yellowish granules identified as Duolite - Tar (14 mg) and nicotine (1.0 mg) deliveries. 7/75

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

FACT 85 (cont.)

Cigarette paper changed to mechanically perforated with citrate as paper component. Tipping paper increased from 30 to 32 mm.	4/76
Introduction of Hauni ventilation (20%) resulted in lower tar delivery (14 to 11 mg).	7/77
Re-introduced with new packaging and lower tar (9 mg) and nicotine (0.7 mg) deliveries. Lower deliveries accomplished using more efficient filter and higher level of ventilation (30%). Continues to utilize "Duolite" granules in filter.	9/77
Discontinued.	12/77

FACT MENTHOL 85

Menthol - test marketed CA filter with a pocket in the middle containing yellowish granules identified as Duolite. Tar (13 mg) and nicotine (0.9 mg) deliveries. Cigarette paper - mechanically perforated with citrate as paper component.	4/76
Introduction of Hauni ventilation (30%) resulted in lower tar delivery (13 to 11 mg).	7/77
Re-introduced with new packaging and lower tar (9 mg) and nicotine (0.7 mg) deliveries. Lower deliveries accomplished using a more efficient filter and higher level of ventilation (30%). Continues to utilize "Duolite" granules in filter.	9/77
Discontinued.	12/77

FIESTA 80 (SOFT PACK)

Test marketed in southern California - manufactured in Mexico - delivers 14 mg tar and 0.6 mg nicotine.	3/85

FLAIR 100

Plain - 100 mm slim cigarette with 27 mm CA filter.	2/70
Discontinued.	

FLAIR MENTHOL 100

Menthol - 100 mm slim cigarette with 27 mm CA filter.	2/70
Discontinued.	

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HALLMARK 85

Plain - New cigarette designed to give uniform smoke deliveries from first puff to last puff - The cigarette paper is coated with sodium chlorate at evenly spaced intervals.	9/70
Discontinued.	12/70

HALLMARK MENTHOL 85

Menthol - New cigarette designed to give uniform smoke deliveries from first puff to last puff - The cigarette paper is coated with sodium chlorate at evenly spaced intervals.	9/70
Discontinued.	12/70

HALLMARK 100

Introduced - test market - packaged in a slide and shell box with an automatic top opening device and delivers 24 mg tar. Blend contains no reconstituted tobacco or expanded stems; filter contains modified ion exchange resin (Duolite).	7/76
Discontinued.	

HALLMARK MENTHOL 100

Introduced - test market - a mentholated version of Hallmark 100 cigarettes. Delivers 23 mg tar.	8/76
Discontinued.	

KENTUCKY KING 85

Introduced, king size. "All tobacco filter."	5/60
Phosphate treated paper.	3/61
Increased TPM and nicotine deliveries achieved by slower static burning and increased alkaloids.	2/62
Discontinued.	12/62

KIM SLIMS 100 (BOX) 25'S

Test marketed in Hawaii and Nashville, Tennessee - delivers 9 mg tar and 0.7 mg nicotine - has a 94 mm length.	7/86

KIM SLIMS 100 MENTHOL (BOX) 25'S

Test marketed in Hawaii and Nashville, Tennessee - delivers 9 mg tar, 0.7 mg nicotine and 0.5 mg smoke menthol - has a 94 mm length.	7/86

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KOOL 80 (BOX)

Introduced in flip-top box - Similar to Kool 85.	5/74

KOOL 83 (BOX)

Filter Length increased (18.9 to 21.1 mm) - no difference in smoke deliveries from the 80 mm (Box) product already on the market.	1/91

KOOL MILDS 83 (BOX)

Filter length increased (18.9 to 21.1 mm) - no difference in smoke deliveries from the 80 mm (Box) product already on the market.	1/91

KOOL 85

New filter, lower RTD.	6/60
Filter fiber denier and weight decreased, no change in filtration efficiency.	6/61
Filter length increased (17 to 20 mm); higher filter efficiency.	3/62
Carbowax (5%) observed in the filter.	12/63
Filler alkaloids increased resulting in higher nicotine delivery.	2/64
TPM (2 mg) and nicotine deliveries decreased as result of change in paper additive, phosphate to citrate.	3/64
Nicotine delivery decreased by decreasing filler alkaloids.	12/64
Filler alkaloids increased.	4/65
Fiber shape changed from I to Y.	3/66
TPM (1 mg) increased.	6/66
TPM (2 mg), nicotine (0.2 mg), and menthol in smoke (0.1 mg) decreased by increasing paper porosity.	10/66
TPM (2 mg) decreased as result of a blend change.	8/67
Filter length (20 to 21 mm) and tipping paper (24 to 25 mm) increased, no change in smoke deliveries.	4/68
Tar (1 mg) and nicotine (0.1 mg) were reduced correlating with a lower filler rod TPM.	7/68
Menthol in smoke and filler increased.	1/69

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KOOL 85 (cont.)

Tipping paper length increased 25 to 26 mm - No other changes.	7/73
Menthol in smoke content increased by increasing filler menthol.	3/76
Higher CO (14 to 16 mg) - change to a less porous cigarette paper (14 to 20 sec.) with a higher level of paper component (0.2 to 0.7%)	11/85

KOOL 85 25's

Test market - similar to Kool 85 - eight packs in a carton for a total of 200 cigarettes	11/85
Discontinued.	9/86

KOOL INTERNATIONAL MENTHOL 95

Test marketed - This brand is packaged in the princess pack. Tar (10 mg). Ventilation consists of 1 row of Laser perforated holes. This cigarette previously available only in foreign markets.	8/79
Discontinued.	

KOOL MILDS 80 (BOX)

Distributed nationally - delivers 11 mg tar, 0.8 mg nicotine and 0.6 mg smoke menthol.	7/86

KOOL MILDS 85

Introduced - Tar (16.5 mg) and nicotine (1.4 mg) - Very similar to Kool 85 except for total alkaloids. Regular and expanded RKS in blend (11%).	4/72
Marketed nationally in July, 1972, with longer filter (21 to 25 mm) and increased tipping paper length (25 to 30 mm). Increase of regular and expanded RKS (11 to 18%). These changes resulted in lower tar (3 mg) and nicotine (0.3 mg).	7/72
Lower total alkaloids (0.3%) and nicotine delivery (0.2 mg).	5/73
Blend change - Lower alkaloids and filler rod TPM resulting in lower tar (2 mg) and nicotine (0.2 mg). Lower puff count and higher RTD noted.	8/74
The addition of expanded tobacco at the 6% level was observed. This change resulted in lower tobacco weight and rod density and an increase in total RTD.	10/78

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KOOL MILDS 85 (cont.)

Lower total alkaloids (0.3%) and nicotine delivery (0.2 mg).	5/73
Blend change - Lower alkaloids and filler rod TPM resulting in lower tar (2 mg) and nicotine (0.2 mg). Lower puff count and higher RTD noted.	8/74
The addition of expanded tobacco at the 6% level was observed. This change resulted in lower tobacco weight and rod density and an increase in total RTD.	10/78
A lower tar (13 to 11 mg) achieved by introduction of filter ventilation (15%) and a change to a more porous cigarette paper. A blend change indicated by a high filler alkaloid content and lower reducing sugars.	10/79
Expanded tobacco eliminated (11 to 0%) - increase in tobacco weight.	3/81
Freon expanded tobacco has been added (11%) resulting in lower tobacco weight (0.692 to 0.670 g).	7/81
Higher CO delivery correlated with a less porous cigarette paper - longer tipping paper length.	1/86

KOOL MILDS 100

Test marketed - A brand extension of Kool Milds 85. Tar (13 mg) and nicotine (1.2 mg) with 19% ventilation. Blend contains 7% expanded tobacco. Ventilation achieved by a band of electrostatic perforation.	8/79
Expanded tobacco eliminated (11 to 0%) - increase in tobacco weight.	3/81
Freon expanded tobacco has been added (11%) resulting in lower tobacco weight (0.884 to 0.829 g).	7/81
Change to a less porous cigarette paper and an increased ventilation noted - no changes in smoke deliveries.	1/86

KOOL NATURALS 85

Introduced - test market - delivers 14 mg tar. Similar to Fact 85 and Vanguard 85 cigarettes. Filter containing Duolite granules described as an "Actron" filter.	8/76
Discontinued.	

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KOOL 100

100 mm mentholated cigarette with 22 mm CA filter.	9/67
Changes in blend, filter length (22 to 25 mm), and tipping paper (27 to 30 mm) did not alter smoke deliveries.	8/68
Menthol in smoke and filter increased.	1/69
Addition of expanded RKS to blend replacing portion of regular RKS.	2/72
Change in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) - Lower tar (1 mg) and nicotine (0.1 mg).	2/73
Reconstituted tobacco content increased (11 to 15%).	5/73
Menthol in smoke content increased by increasing filler menthol.	3/76
Lower tar (18 to 17 mg) resulting from decrease in filler rod TPM delivery. An increase in total RTD was also observed.	5/78
Level of reconstituted tobacco increased from 10 to 16% and level of expanded stems decreased from 17 to 14%.	9/78
Lower tar (16 to 15 mg) and nicotine (1.2 to 1.1 mg) deliveries resulting from a change to a more porous cigarette paper (22 to 12 sec.).	12/78
The addition of 8% expanded tobacco was noted - This change resulted in a lower tobacco weight and rod density.	9/80
Higher tar (14 to 16 mg) and nicotine (0.9 to 1.1 mg) deliveries - increased filler rod TPM, tobacco weight and total alkaloid content - higher smoke menthol (0.4 to 0.5 mg) due to increased menthol in the filler and filter.	11/85

KOOL LIGHTS 85

Name changed from Kool Super Lights 85. Ventilation system changed to two rows of mechanical perforation. These cigarettes are lower in tar (8.6 mg) because of a more efficient filter and higher ventilation level.	9/81
Test marketed in St. Louis, Missouri with new package graphics and white tipping. No changes were noted in smoke deliveries.	1/89

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KOOL LIGHTS 100

Name changed from Kool Super Lights 100. Ventilation system changed to two rows of mechanical perforation. These cigarettes are lower in tar (12.3 mg) because of a more efficient filter and higher ventilation level.	9/81
Tar (11 to 10 mg), nicotine (0.9 to 0.8 mg) and CO (10 to 8 mg) decreased due to increased ventilation (28 to 38%).	5/83
Change to a less porous cigarette paper (14 to 21 seconds) was observed - no changes in smoke deliveries.	11/86
Tar, nicotine and CO decreased as a result of increased ventilation and more porous cigarette paper.	7/87
Test marketed in St. Louis, Missouri with new package graphics and white tipping. No changes were noted in smoke deliveries.	1/89

KOOL SUPER LIGHTS 85

Introduced - 85 mm mentholated cigarette - low tar (9 mg) and nicotine (0.7 mg) resulted primarily from filter ventilation (25%) and low available TPM filler. Mechanically perforated cigarette paper. Typical Brown & Williamson blend. Tar (9 mg) and nicotine (0.8 mg) listed on pack.	7/77
Tar (9 to 6 mg) and nicotine (0.8 to 0.6 mg) deliveries were decreased by increasing the filter ventilation and lowering the tobacco weight. Lower tobacco weight result of addition of 6% expanded tobacco. Paper porosity changed from 7 to 13 seconds. Data listed on pack as tar (7 mg) and nicotine (0.7 mg).	7/79
Discontinued.	

KOOL SUPER LIGHTS 100

Introduced - 100 mm mentholated cigarette - low tar (9 mg) and nicotine (0.8 mg) achieved by filter ventilation (35%) and low available TPM filler. Typical Brown & Williamson blend. Tar (9 mg) and nicotine (0.8 mg) listed on pack.	7/77
Addition of 10% expanded tobacco resulted in a lower tobacco weight and rod density.	11/80
Expanded tobacco eliminated (10 to 0%) - increase in tobacco weight - tar and nicotine data printed on packs was removed.	3/81
Tar (8.1 to 9.4 mg), nicotine (0.65 to 0.72 mg) and CO (9.9 to 12.2 mg) increase - reduced filter ventilation (32 to 24%).	4/81
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KOOL ULTRA 85

Introduced - test market - tar and nicotine deliveries advertised as 2 mg and 0.3 mg, respectively. The filter system is similar to that of the Barclay with mechanical perforation and four longitudinal grooves along the filter.	9/81
Filter changed from "Actron" filter (Barclay-type) to conventional cellulose acetate filter - higher total and filter RTD, lower ventilation and less porous cigarette paper were also noted. Higher smoke deliveries resulted from these changes. Higher smoke menthol correlated with increased filler and filter menthol.	11/86
Filter changed back to "Actron" (Barclay-type) filter.	7/87
Test marketed as Kool Ultra Lights in St. Louis, Missouri with new package graphics and white tipping. No changes were noted in the filter design or smoke deliveries.	1/89

KOOL ULTRA 100

Introduced - test market - tar and nicotine deliveries are 5.7 mg and 0.53 mg, respectively. The filter system is similar to that of the Barclay with mechanical perforation and four longitudinal grooves along the filter.	9/81
Filter changed from "Actron" filter (Barclay-type) to conventional cellulose acetate filter - higher total and filter RTD, lower ventilation and less porous cigarette paper were also noted. Higher smoke deliveries resulted from these changes. A longer filter length was observed.	11/86
Filter changed back to "Actron" (Barclay-type) filter.	7/87
Test marketed as Kool Ultra Lights in St. Louis, Missouri with new package graphics and white tipping. No changes were noted in the filter design or smoke deliveries.	1/89

KOOL DELUXE LIGHTS 83 (BOX)

Test marketed in Hawaii - delivers 10 mg tar, 0.9 mg nicotine, and 0.5 mg smoke menthol.	7/90

KOOL DELUXE LIGHTS 100 (BOX)

Test marketed in Hawaii - delivers 10 mg tar, 0.9 mg nicotine, and 0.5 mg smoke menthol.	7/90

KOOL DELUXE ULTRA LIGHTS 83 (BOX)

Test marketed in Hawaii - delivers 6 mg tar, 0.6 mg nicotine, and 0.4 mg smoke menthol.	7/90

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KOOL DELUXE ULTRA LIGHTS 100 (BOX)

Test marketed in Hawaii - delivers 6 mg tar, 0.6 mg nicotine, and 0.4 mg smoke menthol. 7/90

LIFE 85

TPM (7 mg) and nicotine (0.5 mg) increased by decrease in filter efficiency - Filter changed from 25 mm paper to 25 mm CA. 2/66

TPM (5 mg) and nicotine (0.3 mg) decreased as a result of increase in filter efficiency. Filter changed from 25 mm CA to dual filter 12.5 mm CA and 12.5 mm paper. 12/66

TPM (2 mg) decreased as result of increased filter efficiency - Filter changed to an 18 mm/7 mm (paper/CA). 2/67

TPM (4 mg) and nicotine (0.2 mg) increased as result of a change in filter construction 12.5/12.5 mm (paper/CA) which resulted in decrease in filter efficiency. 3/67

Discontinued.

LIFE FILTER 100

Lowest tar delivery of any 100 mm - Dual filter, paper inner plug, and cellulose acetate outer plug - Tar (10 mg) and nicotine (0.8 mg) data are listed on pack. 6/70

Filter changed from 25 mm dual (paper/CA) to 27 mm CA. Total and filter RTD increased. 8/73

Discontinued.

LYME 85

New flavor - lime-menthol product - Tar (14 mg) and nicotine (0.9 mg) low for B & W product. 10/71

Discontinued.

PHOENIX 120

Plain - Introduced 120 mm cigarette with 30 mm CA filter with a brown cigarette paper containing azo dyes - Circumference 21 mm - Tar (19 mg) and nicotine (1.4 mg) deliveries. 7/75

Discontinued.

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PHOENIX MENTHOL 120

Menthol - Introduced 120 mm cigarette with 30 mm CA filter with a brown cigarette paper containing azo dyes - Circumference 21 mm - Tar (19 mg) and nicotine (1.4 mg) deliveries. 7/75

Discontinued.

PRINCE 85

Imported by Brown & Williamson from Denmark - manufactured by Scandanavian Tobacco International - delivers 16 mg tar and 1.3 mg nicotine. A high level of expanded stem (24%) was in the blend. 11/88

PRINCE LIGHTS 85

Imported by Brown & Williamson from Denmark - manufactured by Scandanavian Tobacco International - delivers 12 mg tar and 1.0 mg nicotine. A high level of expanded stem (24%) was in the blend. 11/88

RALEIGH 70 (FILTER)

Test marketed in southern California - manufactured in Mexico - delivers 16 mg tar and 0.8 mg nicotine. 3/85

RALEIGH EXTRA 85

Distributed in North Carolina - 17 mg tar and 1.0 mg nicotine, sold at generic prices. Cigarette paper utilizes wood pulp. 1/91

RALEIGH EXTRA 100

Marketed in New York - delivers 15 mg tar and 1 mg nicotine, will sell for generic prices - the cigarette paper is 100% wood pulp. 9/90

RALEIGH EXTRA LIGHTS 85

Distributed in North Carolina - 12 mg tar and 0.8 mg nicotine, sold at generic prices. Cigarette paper utilizes wood pulp. 1/91

RALEIGH EXTRA LIGHTS 100

Marketed in New York - delivers 12 mg tar and 0.8 mg nicotine, will sell for generic prices - the cigarette paper is 100% wood pulp. 9/90

RALEIGH EXTRA LIGHTS MENTHOL 85

Distributed in North Carolina - 11 mg tar, 0.7 mg nicotine, and 0.4 mg smoke menthol - sold at generic prices. Cigarette paper utilizes wood pulp. 1/91

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RALEIGH EXTRA LIGHTS MENTHOL 100

Marketed in New York - delivers 9 mg tar, 0.7 mg nicotine - and 0.2 mg smoke menthol - will sell for generic prices - The cigarette paper is 100% wood pulp.	9/90

RALEIGH EXTRA ULTRA LIGHTS 85

Nationally distributed - delivers 6 mg tar and 0.4 mg nicotine, sold at sub-generic prices.	5/91

RALEIGH FILTER 85

Lighter filter with same efficiency.	4/61
Carbowax (5%) observed in the filter.	12/63
Filler alkaloids increased resulting in higher nicotine delivery.	1/64
TPM (4 mg) and nicotine (0.2 mg) decreased as result of change in paper component, phosphate to citrate.	6/64
Fiber shape changed from I to Y.	3/66
TPM (2 mg) increased.	6/66
TPM (2 mg) decreased, paper porosity increased and cigarette length decreased.	2/67
Reconstituted tobacco increased, 6 to 9%.	3/67
Tar (1 mg) reduced by changes to a more porous paper and in tipping paper (24 to 25 mm).	4/68
Filter length increased (20 to 21 mm).	7/68
Reconstituted material increased, 5 to 9%.	9/68
Paper porosity changed (11 to 17 seconds) - No change in tar.	1/69
Tar (2 mg) and nicotine (0.2 mg) decreased, lower alkaloids and tobacco weight observed.	8/69
RKS increased (7 to 18%).	10/69
Addition of expanded RKS to blend replacing portion of regular RKS.	3/72
Tipping paper length increased 25 to 26 mm - No other changes.	7/73
Expanded tobacco eliminated (10 to 0%) - increase in tobacco weight - tar and nicotine data printed on pack has been removed.	3/81

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

RALEIGH FILTER 85 (cont.)

Tobacco weight decreased (0.778 to 0.732 g) due to addition of 4% Freon expanded tobacco to the blend.	11/83
Tar (13.6 to 13.1 mg) and CO (16.5 to 13.8 mg) decreased - change to a more porous cigarette paper (23 to 12 sec.).	1/85
Increased expanded tobacco (4 to 10%) - decreased tobacco weight.	7/85

RALEIGH LIGHTS 85

Introduced - 85 mm version of Raleigh 85 with lower tar (13 mg) and nicotine (0.9 mg). It has 25 mm CA filter and 30 mm tipping paper.	4/73
Brand name changed from Raleigh Extra Milds 85 to Raleigh Lights 85. No other changes were noted.	10/76
Decrease in tar delivery (12 to 10 mg) resulting from introduction of filter ventilation (24%)and a change to a more efficient filter. Changed to a high alkaloid blend and replaced mechanically perforated cigarette paper with inherently porous paper.	4/78
Tar (9 to 8 mg) and nicotine (0.9 to 0.8 mg) deliveries lower correlating with a lower filler rod TPM.	3/79
12% Freon expanded tobacco added to blend.	5/83
Increased amount of reconstituted material and decreased amount of expanded stems - changed to a less porous cigarette paper.	9/85
Tipping paper length increased - lower tar and nicotine deliveries and a lower puff count resulted.	3/86
Expanded tobacco removed from the blend resulting in an increased tobacco weight and rod density.	1/88
Introduced - 100 mm version of Raleigh Lights 85 with 10 mg tar and 0.9 mg nicotine. 27 mm CA filter with 24% ventilation.	8/78
Tar (7.8 to 9.8 mg), nicotine (0.68 to 0.81 mg) and CO (10.7 to 14.4 mg) increased - decrease in filter ventilation (34 to 19%) - higher RTD (4.9 to 5.6).	2/81
Tar (10 to 9 mg), nicotine (0.9 to 0.8 mg) and CO (13 to 11 mg) decreased due to increased ventilation (26 to 32%).	5/83

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

RALEIGH LIGHTS 85 (cont.)

12% Freon expanded tobacco added to blend resulting in lower tobacco weight (0.892 to .826 g/cc) and rod density (0.251 to 0.230 g/cc). Fiber denier changed (2.6/Y to 3.2/Y) resulting in lower filter RTD (4.1 to 3.3 in. H_2O) - Decrease in filtration efficiency (59 to 52%). Tar increased (9 to 10 mg).	1/84
Increased amount of reconstituted material and decreased amount of expanded stems - more efficient filter used.	9/85
Tar (9 to 11 mg) nicotine (0.7 to 0.8 mg) and CO (11 to 13 mg) increased - decreased ventilation (27 to 20%).	11/85
Expanded tobacco removed from the blend. Higher tar, nicotine and CO deliveries resulted; longer filter length was observed (27 to 30 mm).	1/88

RALEIGH 100

100 mm cigarette with 25 mm CA filter.	8/69
Coupon on pack.	9/69
Tar (1 mg) increased correlating with a change in paper porosity (13 to 25 seconds).	3/71
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Tar (1.5 mg) and nicotine (0.1 mg) lower - Lower tobacco weight and rod density noted.	5/72
Change in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) - Tar (1 mg) and nicotine (0.1 mg) decreased.	12/72
Lower tar (17 to 16 mg) resulting from decrease in filler rod TPM delivery.	5/78
Addition of expanded tobacco at the 6% level correlating with a lower tobacco weight and rod density. Lower tar (17 to 16 mg) and filler rod TPM deliveries noted.	4/79
Lower tar (16 to 15 mg) and nicotine (1.2 to 1.1 mg) resulting from a change to a more porous cigarette paper.	1/80
Tar (7.8 to 9.8 mg), nicotine (0.68 to 0.81 mg) and CO (10.7 to 14.4 mg) increased - decrease in filter ventilation (34 to 19%) - higher RTD (4.9 to 5.6).	2/81

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

RALEIGH 100 (cont.)

Expanded tobacco eliminated (10 to 0%) - increase in tobacco weight - tar and nicotine data printed on pack has been removed.	3/81
4% Freon expanded tobacco added to blend resulted in lower tobacco weight (0.886 to 0.831 g) and rod density (0.250 to 0.233 g/cc).	1/84

RALEIGH EXTRA ULTRA LIGHTS 100

Nationally distributed - delivers 6 mg tar and 0.4 mg nicotine - sold at sub-generic prices.	5/91

RICHLAND 85

Introduced - contains 25 cigarettes per pack - delivers 15 mg tar and 1.2 mg nicotine - similar to Viceroy 85.	9/83
National distribution.	6/85

RICHLAND LIGHTS 85

Introduced - contains 25 cigarettes per pack - delivers 11 mg tar and 0.8 mg nicotine.	5/85
National distribution.	6/85
Expanded stems removed from the blend (11% to none) - increased tobacco weight and rod density - higher filler rod TPM correlated with this change.	5/87

RICHLAND MENTHOL 85

Introduced - contains 25 cigarettes per pack - delivers 15 mg tar, 1.1 mg nicotine, and 0.5 mg menthol - similar to Kool 85.	9/83
National distribution.	6/85
Higher CO delivery resulted from less porous cigarette paper with an increased level of paper component.	3/86

RICHLAND 100 25'S

Introduced nationally - 250 cigarettes per carton - delivers 16 mg tar and 1.1 mg nicotine.	5/86

RICHLAND LIGHTS 100 25'S

Introduced nationally - 250 cigarettes per carton - delivers 11 mg tar and 0.8 mg nicotine.	5/86

2055656296

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

ST. JAMES COURT 85

Introduced in Portland, Oregon; New Orleans, Louisianna; and Phoenix, Arizona - utilizes a dual cellulose acetate filter which consists of a 7 mm formed Filtrona section and a 20 mm "Actron" section - the Actron section contains a 20 mm cellulose acetate tube - the blend is not typical of Brown & Williamson products. 11/84

Test market expanded to Hawaii. 6/85

ST. JAMES COURT MENTHOL 85

Introduced in Portland, Oregon; New Orleans, Louisianna, and Phoenix, Arizona - utilizes a dual cellulose acetate filter which consists of a 7 mm formed Filtrona section and a 20 mm "Actron" section - the "Actron" section contains a 20 mm cellulose acetate tube - the blend is similar to Kool Lights. 11/84

Test market expanded to Hawaii. 6/85

ST. JAMES COURT 100 (BOX)

Introduced in Portland, Oregon; New Orleans, Louisianna; and Phoenix, Arizona - utilizes a dual cellulose acetate filter with a 7 mm formed Filtrona section and a 20 mm "Actron" section - the "Actron" section contains a 20 mm cellulose acetate tube - the blend is not typical of Brown & Williamson products. 11/84

Test market expanded to Hawaii. 6/85

ST. JAMES COURT MENTHOL 100 (BOX)

Introduced in Portland, Oregon; New Orleans, Louisianna; and Phoenix, Arizona - utilizes a dual cellulose acetate filter with a 7 mm formed Filtrona section and a 20 mm Actron section - the "Actron" section contains a 20 mm cellulose acetate tube - the blend is similar to Kool Lights. 11/84

Test market expanded to Hawaii. 6/85

SEVENTY 70

Plain - test marketed with mechanically perforated cigarette paper and 17 mm CA filter - 10 mg tar and 0.7 mg nicotine. 6/76

Discontinued.

2055656297

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

SEVENTY MENTHOL 70

Menthol - test marketed with mechanically perforated cigarette paper and 17 mm CA filter - 10 mg tar and 0.7 mg nicotine. 6/76

Discontinued.

SPIRIT 85

Test marketed - 85 mm cigarette delivering 8 mg tar and 0.9 mg nicotine - This new brand has a high efficiency, 25 mm CA filter with 30% ventilation. 10/78

Discontinued.

SPIRIT 100

Test marketed - 100 mm cigarette delivering 9 mg tar and 1.0 mg nicotine - This new brand has a high efficiency, 27 mm CA filter with 27% ventilation. 10/78

Discontinued.

SUEDES 120

Plain - Introduced 120 mm cigarette with 30 mm CA filter with a brown cigarette paper colored with azo dyes - Tar (17 mg) and nicotine (1.2 mg) deliveries - Circumference 21 mm. 9/75

Discontinued.

SUEDES MENTHOL 120

Menthol - Introduced 120 mm cigarette with 30 mm CA filter with a brown cigarette paper colored with azo dyes - Tar (19 mg) and nicotine (1.3 mg) deliveries - Circumference 21 mm. 9/75

Discontinued.

TRAMPS 85

Plain - Introduced - Light brown cigarette paper colored with caramelized sugar. Tar (19 mg) and nicotine (1.1 mg) deliveries. 9/74

Introduced with regular cigarette paper. Lower tar and nicotine deliveries than previous sample. 10/74

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TRAMPS 85 (cont.)

Tar (19 to 16 mg) and nicotine (1.3 to 1.1 mg) decreased. Filler rod TPM decreased (36 to 31 mg). Smoke deliveries change as result of paper change.	4/75
Discontinued.	12/75

TRAMPS MENTHOL 85

Menthol - Introduced - Light brown cigarette paper colored with caramelized sugar. Tar (19 mg) and nicotine (1.1 mg) deliveries.	9/74
Introduced with regular cigarette paper. Lower tar and nicotine deliveries than previous sample.	10/74
Tar (19 to 17 mg) and nicotine (1.1 to 1.0 mg) decreased. Smoke deliveries change as result of paper change.	4/75
Discontinued.	12/75

TRAMPS 110

Introduced plain 110 mm cigarette with light brown cigarette paper colored with caramelized sugar. Circumference 24.6 mm, 30 mm CA filter, and 35 mm tipping paper.	4/75
Discontinued.	12/75

TRAMPS MENTHOL 110

Introduced menthol 110 mm cigarette with light brown cigarette paper colored with caramelized sugar. Circumference 24.6 mm, 30 mm CA filter, and 35 mm tipping paper.	4/75
Discontinued.	

VANGUARD 85

Introduced - Similar to Fact 85 cigarettes previously introduced - CA filter with pocket in the middle containing yellowish granules identified as Duolite - Tar (14 mg) and nicotine (1.0 mg) deliveries.	8/75
Discontinued.	

VANGUARD MENTHOL 85

Introduced - test market - mentholated version of Vanguard 85 - Delivers 14 mg tar.	7/76
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

VICEROY 83

Distributed in Louisiana - 17 mg tar and 1.1 mg nicotine - sold at generic prices. Cigarette paper utilizes wood pulp.	1/91

VICEROY 85

"Deep Weave," more efficient filter.	8/60
Lighter, slightly less efficient filter resulted in slight increase in TPM and nicotine delivery.	6/61
Total RTD reduced 20 mm H20 by changes in plug RTD, rod circumference, tobacco weight, and paper porosity.	8/62
Filter contains carbowax (5%).	5/63
Filter length has increased from 17 to 20 mm.	8/63
Filler alkaloids increased resulting in a higher nicotine delivery.	1/64
TPM (3 mg) and nicotine deliveries decreased, a result of a more porous cigarette paper.	2/64
TPM (2 mg) increased.	6/66
TPM (2 mg) decreased as result of blend change.	8/67
TPM (1 mg) reduced by changes to a more porous paper and in tipping paper (24 to 25 mm).	4/68
Reconstituted material increased, 6 to 9%.	9/68
Tar increased (1 mg) - Change in paper porosity (11 to 18 seconds) noted.	5/69
Tar (1 mg) and nicotine (0.1 mg) decreased, amount of paper component in cigarette paper increased.	7/69
RKS increased (11 to 14%).	10/69
RKS increased (13 to 18%).	10/70
Addition of expanded RKS to blend replacing portion of regular RKS.	3/72
Tipping paper length increased 25 to 26 mm - No other changes.	7/73
Package design change - Tar (15 to 17 mg) and nicotine (1.0 to 1.1 mg) deliveries increased. Blend change observed.	6/75

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

VICEROY 85 (cont.)

Tar (15.0 mg) and nicotine (1.0 mg) deliveries returned to level prior to package design change.	10/75
Lower tar (16 to 14 mg) and nicotine (1.1 to 1.0 mg) deliveries achieved by change to a more efficient filter. Changes in total and filter RTD and filter fiber denier also noted.	3/78
Addition of expanded tobacco at the 6% level was observed. First time a Brown & Williamson product containing expanded tobacco was obtained from the market. Decrease in tobacco weight along with lower tar (14 to 13 mg) and nicotine (1.0 to 1.9 mg) deliveries resulting from the addition of expanded tobacco.	9/78
Tar increased (13.8 to 14.7 mg) due to decreased filtration efficiency (48 to 40%) and change in fiber denier (3.0 to 3.7).	3/83
Tar (15.5 to 14.2 mg) and CO (16.0 to 14.2 mg) decreased - change to a more porous cigarette paper (23 to 12 sec.).	1/85
Blend change resulted in lower level of expanded stems (13 to 5%) - dark colored reconstituted tobacco was replaced with a light colored reconstituted tobacco. The blend change increased tobacco weight. Higher smoke deliveries and a less porous cigarette paper were noted. Ventilation was added (None to 10%). This cigarette is now being sold at a generic price.	1/89

VICEROY EXTRA MILD 85

Introduced - Very similar to Viceroy Lights 85 previously test marketed by Brown & Williamson.	4/74
Tar (14 to 11 mg) and nicotine (1.0 to 0.8 mg) decreased by the introduction of Hauni ventilation at the 23% level. A decrease in total RTD was also noted.	1/77
Blend change resulting in higher filler rod TPM delivery. Changed to a more efficient filter and discontinued use of mechanically perforated cigarette paper. No change in tar or nicotine deliveries observed. Changed from Hauni ventilation to mechanically perforated tipping paper.	4/78
Discontinued.	12/78

VICEROY RICH LIGHTS 85

Introduced - Tar (9 mg) and nicotine (0.8 mg) with a 25 mm CA filter and 36% ventilation. Similar to Viceroy Extra Milds 85 cigarettes.	8/78

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

VICEROY RICH LIGHTS 85 (cont.)

12% Freon expanded tobacco added to blend.	5/83
Name changed to Viceroy Lights.	7/85

VICEROY LIGHTS 83 (BOX)

Distributed in Louisiana - 12 mg tar and 0.8 mg nicotine - sold at generic prices. Cigarette paper utilizes wood pulp.	1/91

VICEROY LIGHTS 85

Introduced - Tar (12.5 mg) and nicotine (1.0 mg), 25 mm CA filter - 30 mm tipping paper - Blend contains expanded RKS.	4/72
Increased level of reconstituted material and decreased level of expanded stems - changed to a less porous cigarette paper.	9/85
Tipping paper length increased.	5/86
Increased level of reconstituted material and decreased level of expanded stems - changed to a less porous cigarette paper.	9/85
Expanded stems removed from the blend (11% to none) - increased tobacco weight and rod density - higher filler rod TPM correlated with this change.	5/87

VICEROY 100

100 mm cigarette with 22 mm CA filter.	10/67
Tar (2 mg) and nicotine (0.1 mg) reduced by changes in filter length (22 to 25 mm), tipping paper (27 to 30 mm) and to a more porous paper (20 to 12 seconds).	8/68
Tar (1 mg) increased. Change in paper porosity (11 to 20 seconds) noted.	5/69
Tar (2 mg) and nicotine (0.2 mg) decreased, change in paper porosity (21 to 14 seconds).	6/69
RKS increased (11 to 14%).	10/69
Tar (2 mg) and nicotine (0.1 mg) were reduced correlating to lower filler rod TPM - A decrease in alkaloids and higher reducing sugars were observed - An increase in RKS was noted.	9/70
RKS increased (13 to 18%).	10/70

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

VICEROY 100 (cont.)

Tar (1 mg) increased correlating with change in paper porosity (12 to 22 seconds).	3/71
Addition of expanded RKS to blend replacing portion of regular RKS.	3/72
Change in filter length (25 to 27 mm) and tipping paper length (30 to 32 mm) - Tar (2 mg) and nicotine (0.2 mg) decreased.	12/72
Package design change. Tar (16 to 17 mg) and nicotine (1.1 to 1.2 mg) deliveries increased. Blend change observed.	6/75
Decrease in tar (18 to 16 mg) and nicotine (1.3 to 1.1 mg) deliveries resulting from a change to a more porous cigarette paper.	11/77
Addition of expanded tobacco at the 7% level correlated with lower tobacco weight and rod density.	5/80
Tar (14 to 16 mg), nicotine (1.0 to 1.1 mg), filler rod TPM (27 to 29 mg) and total alkaloids (1.60 to 1.72%) increased. 9% ventilation added to brand - CO decreased (16 to 14 mg).	3/84
Blend change resulted in lower level of expanded stems (13 to 5%) - dark colored reconstituted tobacco was replaced with a light colored reconstituted tobacco. The blend change increased the tobacco weight. Higher smoke deliveries and a less porous paper were noted. Ventilation increased (8 to 17%). This cigarette is now being sold at a generic price.	1/89

VICEROY RICH LIGHTS 100

Introduced - 100 mm cigarette delivering 8 mg tar and 0.8 mg nicotine. 27 mm CA filter with 40% ventilation. This is a brand extension of Viceroy Rich Lights 85 cigarettes.	9/78
Tar value (8 to 9 mg) changed on pack to comply with FTC Report.	5/82
12% Freon expanded tobacco added to blend.	5/83
Tar (11.5 to 10.2 mg) and CO (11.2 to 9.6 mg) decreased - ventilation increased (20 to 29%).	9/84
Tar (10.2 to 11.6 mg) and CO (9.6 to 11.4 mg) increased - decreased ventilation (29 to 21%).	3/85
Name changed to Viceroy Lights.	7/85

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

VICEROY LIGHTS 100

Increased level of reconstituted material and decreased level of expanded stems - more efficient filter.	9/85
Filter length increased - lower tobacco weight resulted - change in fiber denier - no changes in smoke deliveries.	3/86
Expanded tobacco removed from the blend resulting in an increased tobacco weight and rod density.	1/88

WINGS FILTER 85

85 mm cigarette - 20 mm CA filter - contains 25% reconstituted material.	3/67
Discontinued.	12/68

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

C. LIGGETT GROUP

ADAM 85

Introduced with 20 mm CA filter - Brown colored cigarette paper - paper colored with caramelized sugar.	7/71
Paper component in cigarette paper changed from citrate to phosphate - Tar (3 mg) and nicotine (0.3 mg) deliveries increased by this change. Package also redesigned.	10/72
Discontinued	

ADAM 100

100 mm version of the 85 mm cigarette previously introduced - 25 mm CA filter.	10/72
Discontinued	

CHESTERFIELD 70 (NF)

Paper porosity increased reducing TPM by 4 mg and nicotine delivery by 0.1 mg.	10/62
Alkaloids reduced by 0.1%.	12/62
Tar (22.7 to 19.4 mg), nicotine (1.36 to 1.14 mg) and CO (12.9 to 11.0 mg) reduced - change to more porous cigarette paper (22 to 14 sec.).	2/81
Tar (19 to 18 mg) decreased due to use of perforated porous cigarette paper (7 sec.) with higher level of paper component (0.3 to 1.7%).	1/84

CHESTERFIELD 85 (NF)

Paper porosity increased, reducing TPM by 8 mg and nicotine delivery 0.3 mg.	10/62
RTD increased (3.6 to 3.9 inches of H20).	8/65
TPM (2 mg) and nicotine (0.1 mg) deliveries increased.	12/65
Circumference reduced, resulting in lower tobacco weight.	5/67
Tar (3 mg) reduced by changes in type paper component, phosphate to citrate.	2/68
Coupon added to pack.	4/69
Tar (2 mg) and nicotine (0.1 mg) decreased - Reconstituted tobacco increased (6 to 11%) and RKS added to blend (4%).	9/71

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CHESTERFIELD 85 (NF) (cont.)

Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Expanded stem level increased from 4 to 10%.	9/76
Tar (24.8 to 23.7 mg), nicotine (1.59 to 1.45 mg) and CO (16.0 to 13.5 mg) reduced - change to a more porous cigarette paper (22 to 13 sec.).	1/81
Tar (23.0 to 20.2 mg) and CO (15.4 to 12.4 mg) decreased due to use of perforated cigarette paper that is more porous (14 to 7 sec.) with higher level of paper component (0.4 to 1.4%).	11/83
Tar (20 to 22 mg) and CO (12 to 16 mg) increased due to a change to a less porous paper (7 to 15 sec.) with decreased level of paper component (1.4 to 0.4%).	5/84

CHESTERFIELD LIGHTS 85

Test marketed in St. Louis, Missouri and Peoria, Illinois - delivers 10 mg tar and 0.8 mg nicotine.	11/88

CHESTERFIELD LIGHTS 100

Test marketed in St. Louis, Missouri and Peoria, Illinois - delivers 10 mg tar and 0.8 mg nicotine.	11/88

CHESTERFIELD 101

Test marketed - 101 mm long cigarettes with 20 mm CA filter.	8/67
Tar (2 mg) reduced by increase in tipping paper (24 to 27 mm).	2/68
Tar (3 mg) reduced by changes in blend and to a more porous paper (20 to 11 seconds).	7/68
Coupon added to pack.	4/69
Reconstituted tobacco removed from blend (20 to 0%) - RKS increased (5 to 11%).	10/69
Reconstituted tobacco added to blend (0 to 19%) - RKS lowered (11 to 6%) - Tar (3 mg) and nicotine (0.2 mg) decreased.	6/70
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CHESTERFIELD 101 (cont.)

Filter length (20 to 25 mm) and tipping paper (27 to 30 mm) increased. Fiber denier change - No change in smoke deliveries.	7/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Package changed to be similar to package of Chesterfield nonfilter.	10/74
Fiber shape changed (Y to I).	3/75
Tar (1 mg) lowered by increasing filter and tipping paper lengths. Fiber denier changed from 4.5 to 3.5.	1/76
Brand name changed from Chesterfield 101 to Chesterfield Filter Longs; cigarette length decreased (100.5 to 98.6 mm). Lower tar (1 mg) and nicotine (0.2 mg) deliveries were noted. Expanded stem level increased from 4 to 10%.	9/76
Brand name changed back to Chesterfield 101. Cigarette length and smoke deliveries returned to previous level.	11/76
An increase in the filter length (27 to 30 mm) and tipping paper length (32 to 35 mm) resulted in lower tar (15.3 to 14.1 mg), nicotine (1.10 to 1.04 mg), and CO (16.6 to 15.5 mg) deliveries.	8/81
Discontinued	

CHESTERFIELD FILTER 85

Introduced - King size soft pack - slow burning rate resulting in high TPM and nicotine deliveries.	4/66
Coupon added to pack.	4/69
Package changed - Similar to Chesterfield nonfilter.	1/75
Lower tar (18 to 14 mg) and nicotine (1.1 to 1.0 mg) deliveries resulting from a change to a more porous cigarette paper and a decrease in tobacco weight.	7/78
Tar (14 to 12 mg), nicotine (1.0 to 0.9 mg), and CO (14 to 12 mg) decreased due to increased filter length (21 to 25 mm) and tipping paper length (26 to 30 mm).	9/83
Discontinued	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CHESTERFIELD MENTHOL FILTER 85

Introduced - king size in soft pack - slow burning rate resulting in high TPM and menthol deliveries.	4/66
TPM (3 mg), nicotine (0.1 mg), and menthol in smoke (0.1 mg) decreased as result of changes in cigarette paper and filter efficiency.	3/67
Coupon added to pack.	4/69
Addition of reconstituted tobacco (0 to 19%), RKS decreased (15 to 3%) - Tar (3 mg) and nicotine (0.1 mg) decreased.	6/70
Discontinued	12/74

DECADE 85

Introduced - Test market - Lower tar (6 mg) and nicotine (0.5 mg) deliveries achieved by filter ventilation. Filter contains a 14 mm polyethylene tube insert similar to the one used on L & M Flavor Lights 85.	10/76
Filter changed by removing polyethylene tube insert resulted in lower filter ventilation and higher filter RTD. No change in smoke deliveries.	10/80
Discontinued	

DECADE MENTHOL 85

Introduced - low tar (6 mg) and nicotine (0.5 mg) achieved by high filter ventilation (59%). Has same filter and blend as Decade 85 cigarettes. Tar (5 mg) and nicotine (0.5 mg) listed on pack.	3/77
Filter changed by removing polyethylene tube insert resulted in lower filter ventilation and higher filter RTD. No change in smoke deliveries.	10/80
Discontinued.	

DECADE 100

Introduced - 100 mm cigarette - 5 mg tar and 0.4 mg nicotine with a 27 mm CA filter and 65% ventilation. High level of citrate on the cigarette paper. Filter contains a polyethylene tube insert which is similar in construction to filters used on Decade 85 and L & M Lights 85 and 100 cigarettes.	8/78
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DEVON 85

Introduced - King size mentholated cigarette with "Lark-type" filter - Filter has gas phase activity. 5/64

Discontinued. 12/65

DORADO 85

Test market - New Mexico - delivers 14 mg tar and 1 mg nicotine. 7/83

DUKE 85

Dropped from C.I. History of Brand in C.1. 12/65. 1/66

EAGLE 85

Plain - test marketed - similar to L & M 85 cigarettes. Sell for $.05 less per pack than any other 85 mm product. 1/76

Discontinued.

EAGLE MENTHOL 85

Menthol - test marketed - similar to L & M 85 cigarettes. Sell for $.05 less per pack than any other 85 mm product. 1/76

Discontinued.

EVE LIGHT 100

Introduced 100 mm cigarette delivering 9 mg tar and 0.7 mg nicotine. 27 mm CA filter with 45% ventilation and a high level of citrate on the cigarette paper. Filter contains a polyethylene tube insert which is similar in construction to filters used on Decade 85 and L & M Lights 85 and 100 cigarettes. 8/78

Replaced by Eve Slim Lights 100 (Box). 6/83

EVE SLIM LIGHTS 100 (BOX)

Replaces Eve Light 100 - delivers 12 mg tar and 1 mg nicotine - 22.7 circumference. 6/83

2055656309

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

EVE LIGHT MENTHOL 100

Introduced 100 mm menthol cigarette delivering 9 mg tar and 0.7 mg nicotine. 27 mm CA filter with 45% ventilation and a high level of citrate on the cigarette paper. Filter contains a polyethylene tube insert which is similar in construction to filters used on Decade 85 and L & M Lights 85 and 100 cigarettes.	8/78
Replaced by Eve Slim Lights Menthol 100 (Box).	6/83

EVE SLIM LIGHTS MENTHOL 100 (BOX)

Replaces Eve Light Menthol 100 - delivers 12 mg tar and 1 mg nicotine - 22.7 circumference.	6/83

EVE 100

Plain - 100 mm cigarettes in new pack with floral design - Tipping paper also has floral design.	6/70
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Change in filter length (20 to 25 mm) and fiber denier (3.4 to 4.5) - Change in alkaloids, reducing sugars, and filler rod TPM - Lower tobacco weight and rod density noted.	4/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Cigarette length increased (97.8 to 98.7 mm).	10/74
Fiber shape changed (Y to I).	3/75
Design changed on tipping paper, package and carton.	5/75
Tipping paper length increased from 30 to 32 mm.	1/76
Tar (2 mg) and nicotine (0.1 mg) decreased by increasing filter length from 25 to 27 mm and increasing paper porosity.	3/76
Expanded stem level increased from 4 to 10%.	9/76

EVE MENTHOL 100

100 mm cigarette in new pack with floral design - Tipping paper also has a floral design.	6/70
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Change in filter length (20 to 25 mm) and fiber denier (3.3 to 4.6). No change in smoke deliveries.	12/72

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

EVE MENTHOL 100 (cont.)

Reconstituted tobacco content increased (22 to 26%) - Resulted in lower total alkaloids, tar (1 mg) and nicotine (0.1 mg).	5/73
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Fiber denier (3.4 to 4.5) and fiber shape (Y to I) changed. Filter weight increased. No change in smoke deliveries.	4/75
Design changed on tipping paper, package and carton.	5/75
Tipping paper length increased from 30 to 32 mm.	1/76
Tar (3 mg) and nicotine (0.1 mg) decreased by increasing filter length (25 to 27 mm) and increasing paper porosity. Menthol in smoke decreased (0.6 to 0.5 mg).	4/76
Expanded stem level increased from 4 to 10%.	9/76

EVE ULTRA LIGHTS 100 (BOX)

Distributed in North Carolina, Kentucky, Virginia, New York and Washington, DC - delivers 6 mg tar and 0.6 mg nicotine.	1/91

EVE ULTRA LIGHTS MENTHOL 100 (BOX)

Distributed in North Carolina, Kentucky, Virginia, New York and Washington, DC - delivers 7 mg tar, 0.5 mg nicotine and 0.3 mg smoke menthol.	1/91

EVE 120

Plain - test marketed - 21 mm circumference and filter ventilation of 50% - White cigarette paper and packaged in a crush-proof box.	3/76

EVE MENTHOL 120

Menthol - test marketed - 21 mm circumference and filter ventilation of 50% - White cigarette paper and packaged in a crush-proof box.	3/76

EVE ULTRA 120 (BOX)

Distributed nationally - delivers 5 mg tar and 0.5 mg nicotine.	11/88

EVE ULTRA MENTHOL 120 (BOX)

Distributed nationally - delivers 6 mg tar, 0.6 mg nicotine and 0.4 mg smoke menthol.	11/88

2055656311

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M 80 (BOX)

Introduced - delivers 25 mg tar.	12/57
Tobacco weight decrease.	12/62
Tobacco weight decrease (0.707 to 0.675 g) - tar decreased (16.5 to 14.3 g).	7/78
Tar decreased (13.2 to 12.4 mg) due to filter length increase (20 to 21 mm).	1/82

L & M 85

Citrate to phosphate paper.	10/60
Lighter, dull cellulose acetate filter on all sizes, no changes in efficiency.	9/60-3/61
Faster burning, more porous paper, reduced TPM (5 mg) and nicotine (0.2 mg).	9/62
Alkaloids reduced gradually.	9-12/62
TPM reduced by 1.5 mg - Alkaloids and nicotine delivery also reduced.	4/63
Filler alkaloids increased slightly and fiber denier changed from 2.5 to 2.0 on all sizes.	4/65
Fiber shape (cloverleaf to I) and fiber denier (2.0 to 2.3) changed.	9/65
TPM and nicotine deliveries increased - Filler alkaloids also increased.	12/65
TPM increased - less efficient filter resulting from change in fiber shape and denier.	4/66
Filter length increased, 17 to 20 mm.	10/66
Tar (2 mg) and nicotine (0.1 mg) decreased by lower filler rod TPM.	10/67
Tar (2 mg) and nicotine (0.1 mg) decreased by lower filler rod TPM.	12/67
Nicotine delivery (0.1 mg) increased by higher alkaloids.	7/70
Tar (1 mg) and nicotine (0.1 mg) decreased. Lower tobacco weight and rod density observed.	1/71
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72

2055656312

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M 85 (cont.)

Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Filter length (20 to 21 mm) and tipping paper (24 to 25 mm) increased. Fiber denier (3.5 to 3.0) and fiber shape (Y to I) changed. Alkaloids decreased. Nicotine delivery lower (1.3 to 1.2 mg).	3/75
Tipping paper length increased from 25 to 26 mm.	1/76
Expanded stem level increased from 4 to 10%.	9/76
A change in paper component from phosphate to citrate reduced the tar (18 to 17 mg) and filler rod TPM (34 to 31 mg). Faster static burning time also noted.	2/77
Lower tar (17 to 15 mg) and nicotine (1.1 to 0.9 mg) deliveries resulting from decrease in tobacco weight and a more porous cigarette paper. Levels of expanded tobacco and expanded stems in blend were increased.	3/78
Increase in filter length (21 to 25 mm) and tipping paper (26 to 30 mm). Filter fiber denier (3.0/Y to 3.7/Y) and paper porosity (13 to 16 sec.) were changed.	12/81
Lower total RTD resulted due to change to mechanically perforated cigarette paper. Increased paper component.	3/83
Decreased paper component (1.4 to 0.5%) and less porous paper (7 to 12 sec.) - decreased puff count (7.6 to 6.6) - Lower tobacco weight (0.650 to 0.619 mg) and rod density (0.223 to 0.210 g/cc) were noted - higher CO delivery (12 to 13 mg).	5/85
Change to perforated cigarette paper.	5/86

L & M LIGHTS 30'S

Distributed in North Carolina - deliver 13 mg tar, 1.2 mg nicotine and has a 23 mm circumference - 30 cigarettes per pack - packed in an 8-7-7-8 configuration - 300 cigarettes per carton.	9/87

L & M FLAVOR LIGHTS 85

Introduced - test market - Low tar (8 mg) and nicotine (0.6 mg) deliveries achieved by filter ventilation. Blend contains no reconstituted tobacco or added stem. Filter contains a 14 mm polyethylene tube originating at the tobacco rod end.	9/76

2055656313

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M FLAVOR LIGHTS 85 (cont.)

Filter changed by removing polyethylene tube insert resulted in lower filter ventilation and higher filter RTD. No change in smoke deliveries.	10/80
Discontinued.	

L & M LONG LIGHTS 100

Test marketed - Low tar (8 mg) and nicotine (0.7 mg) deliveries achieved by filter ventilation (56%). Blend contains no reconstituted tobacco or added stem. 27 mm CA filter contains a polyethylene tube insert. Tar listed on package as "Only 8 mg tar."	3/77
Filter change by removing polyethylene tube insert and increasing fiber denier. No change in smoke deliveries.	10/80
Increase in filter length from (27 to 30 mm) and a change to a smaller fiber denier were noted. No change in smoke deliveries.	11/80

L & M LONG LIGHTS MENTHOL 100

Introduced - Tar (8 mg) and nicotine (0.8 mg) - Very similar in characteristics to L & M Long Lights 100.	6/80
Increase in filter length (27 to 30 mm). No change was observed in the smoke deliveries.	8/81
Discontinued.	

L & M 100

100 mm cigarette with 20 mm CA filter.	7/67
Tar (2 mg) and nicotine (0.2 mg) reduced by lower filler rod TPM.	10/67
Tar (1 mg) and nicotine (0.1 mg) reduced by a change to a more porous paper.	12/67
Tipping paper increased (24 to 27 mm), no change in smoke deliveries.	3/68
Nicotine delivery (0.1 mg) increased by higher alkaloids.	7/70
Tar (1 mg) and nicotine (0.1 mg) decreased. Lower tobacco weight and rod density observed.	1/71

2055656314

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M 100 (cont.)

Filter length (20 to 25 mm) and tipping paper (27 to 30 mm) increased . Fiber denier changed resulting in less efficient filter. Tar (1 mg) and nicotine (0.1 mg) increased.	5/71
Addition of expanded RKS to blend replacing a portion of tobacco weight and rod density.	3/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Cigarette length decreased 100 to 99 mm.	9/73
Fiber shape changed (Y to I).	3/75
Tar (2 mg) decreased resulting from increased filter and tipping paper lengths. A more porous cigarette paper was also noted.	1/76
Expanded stem level increased from 4 to 10%.	9/76
Lower tar (17 to 15 mg) and nicotine (1.1 to 1.0 mg) deliveries resulting from decrease in tobacco weight and a change to a more porous cigarette paper. Levels of expanded tobacco and expanded stems in blend were increased.	3/78
Tar (14.3 to 13.2 mg) and nicotine (1.06 to 0.99 mg) reduced - increase in tipping paper length (32 to 35 mm).	2/81
Filter length increased (27 to 30 mm) - higher filter RTD (2.5 to 2.9) - decrease in tobacco weight (0.16 to 0.18 g).	6/81
11% Freon expanded tobacco added to blend.	6/83
Tobacco weight (0.754 to 0.700) and rod density (0.227 to 0.208 g/cc) decreased due to increased amount of freon expanded tobacco in the blend (17 to 28%).	7/83
Tar (13.2 to 12.4 mg) and CO (14.7 to 13:0 mg) deliveries decreased due to the use of perforated cigarette paper that is more porous (14 to 7 sec.) with a higher level of paper component (0.4 to 1.4%).	11/83
Filter ventilation added (36%)-cigarette paper changed from mechanically perforated to inherently porous-permeability decreased (119 to 68 CU)-lower tar (13 to 11 mg) and CO (12 and 11 mg) deliveries and lower total RTD (121 to 99 mm) were noted - a higher puff count (8 to 9) and longer static burning time (7 to 8 min.) were noted.	7/90

2055656315

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M 100 30'S

Test marketed in Tennessee - The carton advertises "10 Extra per Pack - No Extra Cost." Reduced circumference (22.6 to 24.8 mm), lower tobacco weight (0.61 to 0.72 g), lower filter weight (0.13 to 0.17 g), no ventilation, lower RTD (59 vs. 81 mm of H_2O), denier changed from 3.6/Y to 5.5/Y, permeability increased from 64 to 161 ml/cm^2 x min., cigarette paper is perforated similarly to L & M 85. FTC tar increased (12 to 14 mg) and puff count decreased (10.2 to 8.7 puffs/cigt.).	5/91

L & M MENTHOL 100

Introduced - 100 mm mentholated cigarette with 20 mm CA filter.	2/67
Tar (3 mg) decreased as tipping paper length was increased.	11/67
Nicotine delivery (0.1 mg) increased by higher alkaloids.	7/70
Tar (2 mg) and nicotine (0.1 mg) decreased correlating with lower filler rod TPM.	11/71
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Filter length (20 to 25 mm) and tipping paper (27 to 30 mm) increased. No change in filter efficiency or smoke deliveries.	10/72
Cigarette length decreased 100 to 99 mm.	9/73
Fiber shape changed (Y to I).	4/75
Lower tar (2 mg) and nicotine (0.1 mg) as result of increase in filter length and tipping paper length. Lower tobacco weight and reducing sugars content noted.	6/76
Expanded stem level increased from 4 to 10%.	9/76
Lower tar (17 to 15 mg) delivery observed. A change to a more porous cigarette paper and a reduction in tobacco weight were also noted.	7/78
Discontinued.	

L & M SUPERIOR 85

Test marketed - Texas - delivers 14 mg tar and 1 mg nicotine - packaged in a black pack.	7/83
Discontinued.	

2055656316

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

L & M ULTRA LIGHTS 100 30'S

Test marketed in Tennessee - 6 mg tar and 0.5 mg nicotine - The carton advertises "10 Extra per Pack - No Extra Cost." Reduced circumference (22.8 vs. 24.8 mm), and lower tobacco weight (0.62 vs. 0.72 g).	5/91

LARK 85

Introduced - king size in soft pack - new triple filter containing special carbon granules with gas phase activity.	4/63
Carbon content increased.	4/64
TPM (2 mg) and nicotine (0.1 mg) deliveries decreased.	9/66
Fiber shape changed (I to Y) - no change in smoke deliveries.	1/68
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Reduction in gas phase activity - lower carbon content.	3/72
Alkaloids and reducing sugars higher - Nicotine delivery increased (0.1 mg).	5/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Tar delivery increased (2 mg) - Filler rod TPM increased indicating blend change.	4/74
Tar delivery (2 mg) decreased correlating with a lower filler rod TPM.	1/76
Tar increased (1 mg) correlating with an increase in filler rod TPM.	5/76
Expanded stem level increased from 4 to 10%.	9/76

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LARK 85 (cont.)

Lower tar (17 to 15 mg) and nicotine (1.3 to 1.1 mg) deliveries resulting from a change to a more porous paper and a lower tobacco weight. An increase in expanded tobacco (5 to 7%) and a decrease in the reconstituted material (16 to 14%) correlated with the lower tobacco weight. Circumference decreased from 25.0 to 24.7 mm.	6/79
Tipping paper length increased (25 to 30 mm) - less porous cigarette paper (7 to 15 sec.) - Tar decreased (14.0 to 13.5 mg).	1/82
Filter length increased (20 to 25 mm) - outer plug of plug-space-plug increased - decrease in tobacco weight.	6/82
Increased level of expanded tobacco (17 to 23%) - decreased tobacco weight and rod density.	7/85

LARK 100

Introduced - 100 mm cigarette with CA-space-CA filter, with space containing approximately 88 mg of carbon.	9/68
Tar (1 mg) increased correlating to a change in paper porosity and slower static burning time.	4/71
Addition of expanded RKS to blend replacing a portion of regular RKS.	3/72
Alkaloids and reducing sugars higher - Nicotine delivery increased (0.1 mg).	5/72
Expanded tobacco added to blend (7%) resulting in lower tobacco weight and rod density.	6/73
Cigarette length decreased 100 to 99 mm.	9/73
Expanded stem level increased from 4 to 10%.	9/76
Increases in filter length (20 to 25 mm) and tipping paper length (28 to 30 mm) resulted in a slight reduction in tar delivery (18.7 to 18.2 mg). A lower tobacco weight was also noted.	9/77
Lower tar (18 to 16 mg) and nicotine (1.3 to 1.2 mg) deliveries resulting from a change to a more porous cigarette paper and a lighter tobacco weight. Increase in expanded tobacco (5 to 7%).	6/79
Tipping paper length increased (30 to 35 mm) - less porous cigarette paper (7 to 15 sec.) - decrease in tar (14.7 to 14.2 mg).	1/82

2055656318

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LARK 100 (cont.)

Tobacco weight (0.799 to 0.765 g) decreased - increased filter length (25 to 30 mm). 7/82

Increased level of expanded tobacco (17 to 23%) - decreased tobacco weight and rod density. 7/85

LARK II 85

Test marketed - low tar (8 mg) and nicotine (0.5 mg) cigarette with a 25 mm CA filter with ventilation (47%). The CA filter has a pocket containing carbon granules (14 mg). Filter similar in construction to the ones used by Brown & Williamson on products containing Duolite granules in filters. Tar listed on pack as "Only 8 mg." 6/77

Discontinued.

LARK LIGHTS 85

Test marketed - 85 mm cigarette delivering 8 mg tar and 0.6 mg nicotine - 25 mm CA filter containing charcoal granules with 40% ventilation. Blend contains 19% Freon expanded tobacco. 11/78

The elimination of filter ventilation resulted in an increase in tar (7.1 to 12.8 mg), nicotine (0.70 to 0.99 mg) and CO (6.9 to 13.8 mg) deliveries. A change in filter construction from carbon in a pocket to carbon in a plug-space-plug filter was noted. An increase in carbon content (7 to 64 mg) and a more porous cigarette paper (12 to 7 sec.) were noted. Expanded tobacco decreased (26 to 15%) and reconstituted tobacco increased (10 to 16%). This resulted in an increase in tobacco weight (0.589 to 0.640 g). The packaging was changed from white to red. These cigarettes are now similar to Lark 85. 8/81

Increased level of expanded tobacco (17 to 23%) - decreased tobacco weight and rod density. 7/85

LARK LIGHTS 100

Test marketed - 100 mm cigarette delivering 7 mg tar and 0.6 mg nicotine - 25 mm CA filter containing charcoal granules with 40% ventilation. Blend contains 19% Freon expanded tobacco. 11/78

2055656319

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LARK LIGHTS 100 (cont.)

The elimination of filter ventilation resulted in an increase in tar (7.2 to 13.1 mg) nicotine (0.65 to 1.08 mg) and CO (6.9 to 13.1 mg) deliveries. A change in filter construction from carbon in a pocket to carbon in a plug-space-plug filter was noted. An increase in carbon content (6 to 65 mg) and a more porous cigarette paper (12 to 6 sec.) were noted. Expanded tobacco decreased (26 to 15%) and reconstituted tobacco increased (10 to 16%). This resulted in an increase in tobacco weight (0.717 to 0.802 g). The packaging was changed from white to red. These cigarettes are now similar to Lark 100. 8/81

Tobacco weight (0.794 to 0.762 g) decreased - increased filter length (25 to 30 mm). 7/82

Increased level of expanded tobacco (17 to 23%) - decreased tobacco weight and rod density. 7/85

Higher CO delivery (13 to 14 mg) resulted from a decreased level of paper component (1.8 to 0.6%). 3/87

MASTERPIECE 85

Introduced - King size in soft pack with "pipe tobacco blend" - High TPM and nicotine. 6/65

Discontinued. 12/65

OASIS 85

Dropped from C.I. History of Brand in C.1. 12/65. 1/66

OMNI LUXURY LIGHTS MENTHOL 100

Introduced - test market - Tar (9.2 mg) and nicotine (0.74 mg). The ventilation system consists of one row of laser perforation. 7/81

Discontinued.

PYRAMID 85 (NF)

Introduced nationally - will sell for $2.50 less per carton than generic cigarettes - delivers 21 mg tar and 1.4 mg nicotine. 1/89

PYRAMID FULL FLAVOR 85

Introduced nationally - will sell for a subgeneric price - delivers 15 mg tar and 1.1 mg nicotine - uses wood pulp cigarette paper. 9/89

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PYRAMID FULL FLAVOR 85 (MENTHOL)

Introduced nationally - will sell for a subgeneric price - delivers 15 mg tar, 1.1 mg nicotine and 0.5 mg smoke menthol - uses wood pulp cigarette paper. 9/89

PYRAMID LIGHTS 85

Introduced nationally - will sell for $2.50 less per carton than generic cigarettes - delivers 14 mg tar and 1.1 mg nicotine. 1/89

Tar (14 to 11 mg), nicotine (1.1 to 0.8 mg) and CO (13 to 12 mg) deliveries decreased as the result of ventilation (none to 20%). Paper permeability decreased (143 to 46 CU) - fiber denier changed (4.4 to 3.2) - higher total RTD (117 to 126 mm) and filter RTD (65 to 96 mm) were noted. 3/90

PYRAMID FULL FLAVOR 100

Introduced nationally - will sell for a subgeneric price - delivers 16 mg tar and 1.3 mg nicotine - uses wood pulp cigarette paper. 9/89

PYRAMID FULL FLAVOR MENTHOL 100

Introduced nationally - will sell for a subgeneric price - delivers 16 mg tar, 1.3 mg nicotine and 0.5 mg smoke menthol - uses wood pulp cigarette paper. 9/89

PYRAMID LIGHTS 100

Introduced nationally - will sell for $2.50 less per carton than generic cigarettes - delivers 14 mg tar and 1.1 mg nicotine. 1/89

Tar (13 to 11 mg), nicotine (1.0 to 0.9 mg) and CO (14 to 11 mg) deliveries decreased as the result of ventilation (none to 33%). A higher puff count (8.3 to 10.0), lower total RTD (131 to 110 mm) and higher filter RTD (65 to 79 mm) were observed. A less permeable paper was noted (77 to 67 CU). 3/90

PYRAMID LIGHTS MENTHOL 100

Introduced nationally - will sell for $2.50 less per carton than generic cigarettes - delivers 14 mg tar, 1.1 mg nicotine and 0.5 mg smoke menthol. 1/89

Tar (14 to 11 mg), nicotine (1.1 to 0.9 mg) and CO (14 to 11 mg) deliveries as a result of ventilation (none to 34%). A lower level of paper component (2.0 to 0.5%) and a change to a less permeable cigarette paper (124 to 53 CU) resulted in a higher puff count (8.3 to 9.8). A lower total RTD (125 to 102 mm) and higher filter RTD (69 to 80 mm) were noted. 3/90

2055656321

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

PYRAMID ULTRA LIGHTS 100

Introduced nationally will sell for $2.50 less per carton than generic cigarettes - delivers 6 mg tar and 0.6 mg nicotine.	1/89

ST. MORITZ 100

Plain - Test marketed - Previously marketed by Larus & Bro. Blend contains both expanded tobacco and stems. Tar delivery is 18 mg.	7/74
Tar decreased from 19 to 16 mg.	8/76
Filter length increased 25 to 27 mm.	7/77
Tar decreased 16 to 13 mg; change to a more porous, mechanically perforated cigarette paper.	7/78

ST. MORITZ MENTHOL 100

Menthol - Test marketed - Previously marketed by Larus & Bro. Blend contains both expanded tobacco and stems. Tar delivery is 18 mg.	7/74
Lower tar (17 to 14 mg) and nicotine (1.1 to 1.0 mg) deliveries resulting from an increase in filter length (25 to 27 mm) and a change to a more porous cigarette paper (22 to 13 seconds).	2/78
Replaced inherently porous cigarette paper with mechanically perforated paper. Decrease in tar (14.4 to 13.7 mg).	7/78

SAVVY LIGHTS 100

Test marketed in St. Louis, Missouri and Peoria, Illinois - delivers 10 mg tar and 0.9 mg nicotine.	11/88
Discontinued.	1/91

SAVVY LIGHTS MENTHOL 100

Test marketed in St. Louis, Missouri and Peoria, Illinois - delivers 10 mg tar, 0.9 mg nicotine and 0.4 mg smoke menthol.	11/88
Discontinued.	1/91

SAVVY ULTRA LIGHTS 100

Test marketed in St. Louis, Missouri and Peoria, Illinois - delivers 6 mg tar and 0.6 mg nicotine.	11/88
Discontinued.	1/91

2055656322

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

STRIDE 85

Value entry product distributed in Syracuse and Rochester, New York and Omaha, Nebraska. The pack is silver and burgundy. Similar to L & M 85 in smoke deliveries. 7/84

National. 1/85

STRIDE 100

Value entry product distributed in Syracuse and Rochester, New York and Omaha, Nebraska. The pack is silver and burgundy. Similar to L & M 100 in smoke deliveries. 7/84

National. 1/85

VELLO 85

Plain - Test marketed 21 mm CA filter with a single row of ventilation holes having a center core of 8.0 Y-shape fibers and an outer periphery of 3.0 I-shape fibers - Filter system developed by Dr. Vello Norman - Tar (12 mg) and nicotine (0.8 mg) deliveries. 10/75

Cigarette re-engineered - Lower tar and nicotine as a result of a change in filter construction and blend formulation. 11/76

Discontinued.

VELLO MENTHOL 85

Menthol - Test marketed 21 mm CA filter with single row of ventilation holes having a center core of 8.0 Y-shape fibers and an outer periphery of 3.0 I-shape fibers - Filter system developed by Dr. Vello Norman - Tar (12 mg) and nicotine (0.8 mg) deliveries. 10/75

Cigarette re-engineered - Changes in filter construction and blend formulation same as for Vello 85 cigarettes. 11/76

Discontinued.

WORTH 85

Test marketed in Wisconsin - delivers 14 mg tar and 1.0 mg nicotine. 1/91

WORTH 100

Test marketed in Wisconsin - delivers 15 mg tar and 1.0 mg nicotine. 1/91

2055656323

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

WORTH LIGHTS 100

Test marketed in Wisconsin - delivers 12 mg tar and 0.8 mg nicotine. 1/91

WORTH LIGHTS MENTHOL 100

Test marketed in Wisconsin - delivers 11 mg tar, 0.8 mg nicotine and 0.5 mg smoke menthol. 1/91

WORTH ULTRA LIGHTS 85

Test marketed in Wisconsin - delivers 6 mg tar and 0.5 mg nicotine. 1/91

WORTH ULTRA LIGHTS 100

Test marketed in Wisconsin - delivers 7 mg tar and 0.6 mg nicotine. 1/91

2055656324

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

D. LORILLARD COMPANY

ASPEN MENTHOL 85

Test marketed - Low tar (9 mg) and nicotine (0.8 mg) with a 25 mm CA filter containing 33% ventilation. High level of citrate in a fast burning cigarette paper. Porous tipping paper with perforated plug wrap. 7/79

Discontinued.

ASPEN MENTHOL 100

Test marketed - Low tar (9 mg) and nicotine (0.8 mg) with a 27 mm CA filter containing 40% ventilation. High level of citrate in a fast burning cigarette paper. Porous tipping paper with perforated plug wrap. 7/79

Discontinued.

BEECH-NUT 85 (NF)

Introduced - nonfilter, king size similar to Old Gold Straights. 7/61

Discontinued.

BISTRO 85

Introduced - test market - Delivers 11 mg tar and 1.02 mg nicotine. The filter system uses micro-mechanical perforation. 9/81

Discontinued.

BISTRO MENTHOL 85

Introduced - test market - Delivers 11 mg of tar, 1.01 mg of nicotine, and 0.35 mg menthol. The filter system uses micro-mechanical perforation. 9/81

Discontinued.

CENTURY GREAT LENGTHS 100

100 mm cigarette with 20 mm CA filter. Name and warning label printed on cellophane - no identification on package. 9/67

Tar (2 mg) reduced by increase in tipping paper (24 to 30 mm). 2/68

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CENTURY GREAT LENGTHS 100 (continued)

Tar (1 mg) and nicotine (0.1 mg) decreased - change in filter - a new 25 mm dual filter with carbon noted.	3/69
Discontinued.	

DANVILLE 85

Introduced - king size filter cigarette.	4/66
Discontinued.	12/66

DANVILLE MENTHOL 85

Introduced - mentholated cigarette with 20 mm CA filter.	8/66
Discontinued.	12/66

DUNCAN 85 (NF)

Introduced - king size nonfilter - filler has a larger cut than normal domestic cigarettes.	9/65
Plastic mouthpiece added to cigarette - no filtration from mouthpiece.	11/65
Discontinued.	

HARLEY DAVIDSON 85

Test marketed - Terre Haute, Indiana - 13 mg tar, 0.8 mg nicotine - black pack with Harley Davidson logo.	9/87
Re-introduced as a generic product in Arkansas test market - delivers 11 mg tar and 0.8 mg nicotine.	11/89

HARLEY DAVIDSON LIGHTS 85

Test marketed in Arkansas as a generic product - packaged in a black pack with a gold eagle embossed on the pack - delivers 8 mg tar and 0.7 mg nicotine.	11/89

HELMAR 80

80 mm cigarette - 17 mm CA filter - contains no RKS or reconstituted material.	4/67
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

HERITAGE 85

Introduced - test market - Delivers 10.9 mg tar and 0.93 mg nicotine. The ventilation system consists of a band of micro-mechanical perforation. These cigarettes are similar to Bistro 85, Rebel 85, and Maverick 85. 11/81

Discontinued.

HERITAGE LIGHTS 85

Test marketed in Louisville, Kentucky; Portland, Oregon and Maine. Delivers 10 mg tar and 0.8 mg nicotine. 3/90

HERITAGE 100

Introduced - test market - Delivers 11.6 mg tar and 1.01 mg nicotine. The ventilation system consists of a band of micro-mechanical perforation. These cigarettes are similar to Rebel 100 and Maverick 100. 11/81

Discontinued.

HERITAGE LIGHTS 100

Test marketed in Louisville, Kentucky; Portland, Oregon and Maine. Delivers 10 mg tar and 0.8 mg nicotine. 3/90

KENT 80 (BOX)

Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight and rod density and higher total RTD - Also, lower puff count, tar and nicotine deliveries noted. 12/72

Filter length (20 to 21 mm) and tipping paper length (24 to 25 mm) increased. No change in smoke deliveries noted. 4/77

Decrease in tar delivery (15 to 13 mg) resulting from introduction of filter ventilation (17%). The new diluted filter is referred to on the pack as the Micronite II filter. 6/78

Package changed. 9/90

KENT 85

Reconstituted tobacco first observed - Lighter filter with same efficiency. 5/61

Less porous paper with no effect on TPM or nicotine deliveries. 11/61

2055656327

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT 85 (cont.)

Alkaloids reduced by 0.1%.	10/63
Fiber shape changed cloverleaf to I.	4/64
Filter length increased 17 to 20 mm.	8/64
Alkaloids and nicotine delivery increased slightly.	7/65
Alkaloids and nicotine delivery increased.	9/65
TPM increased 1 mg.	4/66
TPM decreased 1 mg by an increase in paper porosity.	6/67
Tipping paper increased 24 to 25 mm.	3/69
Reconstituted tobacco content increased (8 to 12%).	4/69
RKS decreased (8 to 4%).	10/69
Reconstituted tobacco increased 10 to 17%.	10/70
Recon. tobacco increased (16 to 18%); RKS decreased (6 to 2%).	9/71
RKS decreased 2 to 0%.	10/71
Alkaloids and reducing sugars increased - Nicotine delivery increased (0.1 mg).	5/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density and higher total RTD - Also, lower puff count, tar and nicotine deliveries noted.	12/72
Filter length increased (20 to 21 mm). Lower tobacco weight and rod density noted.	7/76
Lower tar (17 to 13 mg) and nicotine (1.1 to 1.0 mg) resulted from the introduction of filter ventilation (27%). New ventilated filter is referred to on pack as the Micronite II filter.	6/77
Decrease in tar delivery (13 to 12 mg) resulting from an increase in filter ventilation.	11/78
Package change.	9/90

KENT MENTHOL 85

Test marketed - Different from Kent 85 plain in many characteristics.	5/71
Discontinued.	

2055656328

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT 100

Introduced - 100 mm cigarette with 20 mm CA filter.	4/67
Tar (1 mg) reduced by increasing tipping paper (24 to 27 mm).	11/67
Tar (2 mg) and nicotine (0.1 mg) reduced by increasing tipping paper (27 to 30 mm).	1/68
Tar (1 mg) and nicotine (0.1 mg) reduced by a change to a more porous paper.	5/68
RKS decreased (8 to 4%).	10/69
Reconstituted tobacco increased 10 to 17%.	10/70
Fiber shape changed from X-shape to Y-shape - Filter weight decreased - Tar increased (1 mg).	9/71
Reconstituted tobacco increased 16 to 18% - RKS decreased 6 to 2%.	9/71
RKS decreased 2 to 0%.	10/71
Alkaloids and reducing sugars increased - Nicotine delivery increased (0.1 mg).	5/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density puff count, and higher total RTD - Also, lower tar and nicotine deliveries noted.	12/72
Tipping paper length increased 30 to 32 mm - tar (1 mg) and nicotine (0.1 mg) decreased.	11/74
Cigarette length (99.2 to 98.3 mm) decreased. Tobacco weight (0.87 to 0.84 g) decreased.	5/75
Filter length (25 to 27 mm) increased. No change in smoke deliveries.	6/75
Cigarette length increased (98.9 to 99.3 mm).	8/76
Lower tar (19 to 15 mg) and nicotine (1.3 to 1.1 mg) resulted from a change to a more efficient filter (42-52%) and more porous cigarette paper. Higher total and filter RTD's noted.	6/77
Lower tar delivery (15 to 13 mg) resulting from introduction of filter ventilation (30%). Change to a less efficient filter was also noted. The new ventilated filter is referred as the Micronite II filter.	7/77

2055656329

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT 100 (cont.)

Decrease in filter ventilation and change to a less porous cigarette paper resulted in an increase in tar delivery (13.6 to 14.5 mg).	12/77
Decrease in tar delivery (14 to 13 mg) resulted from an increase in filter ventilation. Decrease in total RTD was noted.	8/78
Tipping paper length increased (32 to 34 mm) - no changes were noted in filter length or smoke deliveries.	3/87
Package change.	9/90

KENT MENTHOL 100

100 mm mentholated cigarette similar to Kent 100.	6/70
Filter fiber shape changed from X-shape to Y-shape - Filter weight decreased.	8/71
Recon. tobacco increased 16 to 18% - RKS decreased 6 to 2%.	9/71
RKS decreased 2 to 0%.	10/71
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, and puff count. Also, lower tar and nicotine deliveries noted.	12/72
Tipping paper length increased (30 to 32 mm) - Lower tar (1 mg) and nicotine (0.1 mg).	1/75
Cigarette length (99.1 to 98.3 mm) decreased. Tobacco weight (0.84 to 0.82 g) decreased.	5/75
Filter length increased from 25 to 27 mm.	5/76
Cigarette length increased (98.3 to 99.2 mm).	8/76
Introduction of filter ventilation at the 25% level resulted in lower tar delivery (17 to 15 mg).	8/78

KENT III 85

Test marketed - 85 mm cigarette delivering 4 mg tar and 0.4 mg nicotine. Characterized by high alkaloid blend (2.8%) containing 19% Freon expanded tobacco. 25 mm dual CA filter with 63% ventilation.	11/78
Tar (3 to 2 mg) data changed on pack to comply with FTC Report.	4/82
Tar and nicotine deliveries removed from the pack.	7/83
Package changed.	9/90

2055656330

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT III 100

Brand extension of Kent III 85. Tar (5 mg) and nicotine (0.5 mg) deliveries. Brand characterized by a high alkaloid blend containing 19% expanded tobacco and a dual 27 mm CA filter with 51% ventilation. Ventilation achieved by 6 rows of mechanically perforated holes.	10/79
Tar (5 to 4 mg) and nicotine (0.6 to 0.5 mg) data changed on pack to comply with FTC Report.	4/82
Tar and nicotine deliveries removed from the pack.	7/83
Package changed.	9/90

KENT III 100 (BOX)

Tipping decreased (35 to 34 mm) - lower tar, nicotine and CO deliveries resulted from increased ventilation.	7/87
Tar, nicotine and CO increased as a result of lower ventilation.	11/87
The tar, nicotine and CO deliveries decreased as a result of higher ventilation. A lower total RTD was noted.	1/88
Nationally introduced - similar to Kent III 100 (Soft Pack).	11/84

KENT GOLDEN LIGHTS 80 (BOX)

Introduced nationally - delivers 9 mg tar and 0.7 mg nicotine.	7/85

KENT GOLDEN LIGHTS 85

Plain - Introduced porous tipping paper with perforated plug wrap - Longest tipping paper (32 mm) of any 85 mm cigarette - Tar (9 mg) and nicotine (0.8 mg) deliveries.	11/75
Tar (9 to 8 mg) and nicotine (0.8 to 0.7 mg) deliveries decreased by increasing filter ventilation and paper porosity. Filler alkaloids content decreased.	3/76
Cigarette length increased (84.2 to 84.8 mm). Decrease in rod density and total RTD.	12/76
Cigarette length decreased (84.7 to 84.1 mm); lower tobacco weight also noted.	7/78
Lorillard changed the name of Kent Golden Lights 85 to Golden Lights 85. The product is the same; only the name has changed.	10/78
Tar (8 to 7 mg) and nicotine (0.8 to 0.7 mg) values changed on pack to comply with FTC Report.	5/82

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT GOLDEN LIGHTS 85 (cont.)

Name changed back to Kent Golden Lights 85.	6/83
Increased tar, nicotine and CO deliveries resulted from lower ventilation.	1/86
Perforation type changed from porous to laser - lower ventilation (38 to 31%) and higher total RTD (98 to 137 mm) and filter RTD (86 to 113 mm) resulted. Higher CO was observed (8 to 10 mm).	7/90
Package changed	9/90

KENT GOLDEN LIGHTS MENTHOL 85

Test marketed - similar to Golden Lights 85 - Tar (8 mg) and nicotine (0.7 mg) deliveries.	6/76
Lower tar delivery (8.7 to 7.4 mg) resulting from an increase in filter ventilation.	11/77
Lorillard changed the name of Kent Golden Lights Menthol 85 to Golden Lights Menthol 85. The product is the same; only the name has changed.	10/78
Name changed back to Kent Golden Lights Menthol 85.	6/83
Tar (8 to 9 mg) and CO (8 to 9 mg) deliveries increased due to higher level of paper component (1.3 to 2.1%) - higher filler menthol (1.6 to 2.0 mg) correlated with higher smoke menthol (0.28 to 0.36 mg).	3/84
Paper component decreased (2.1 to 1.6%) - no changes in smoke deliveries.	9/84
Tar (8.7 to 8.0 mg) and CO (9.0 to 7.4 mg) decreased - increased filter ventilation (34 to 43%).	1/85
Increased tar, nicotine and CO deliveries resulted from lower ventilation.	3/86
Perforation type changed from porous to laser - lower ventilation (37 to 29%) and higher total RTD (100 to 133 mm) and filter RTD (84 to 114 mm) resulted. Higher CO was observed (8 to 9 mm).	7/90
Package changed	9/90

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

KENT GOLDEN LIGHTS 100

Introduced - low tar (9 mg) and nicotine (0.8 mg) with 27 mm CA filter containing ventilation (40%). High level of paper component in a fast burning cigarette paper. Porous tipping paper with perforated plug wrap. Tar (10 mg) and nicotine (0.9 mg) listed on pack.	5/77
Lorillard changed the name of Kent Golden Lights 100 to Golden Lights 100. The product is the same; only the name has changed.	10/78
Nicotine value (0.7 to 0.8 mg) changed on pack to comply with FTC Report.	5/82
Name changed back to Kent Golden Lights 100.	6/83
Tipping decreased (35 to 34 mm).	7/87
Package changed.	9/90

KENT GOLDEN LIGHTS 100 BOX

Introduced nationally - delivers 9 mg tar and 0.8 mg nicotine.	7/85

KENT GOLDEN LIGHTS MENTHOL 100

Introduced - Similar to the Golden Lights 100 cigarettes.	5/77
Lorillard changed the name of Kent Golden Lights Menthol 100 to Golden Lights Menthol 100. The product is the same; only the name has changed.	10/78
Tar data changed on pack (8 to 7 mg) to comply with FTC Report.	6/82
Name changed back to Kent Golden Lights Menthol 100.	6/83
Package changed.	9/90

L.T. BROWN 120

Plain - Introduced 120 mm cigarettes - 30 mm CA filter. Tar (20 mg) and nicotine (1.5 mg) deliveries. Dark brown cigarette paper with pin-stripe lines. Discontinued.	6/75

L.T. BROWN MENTHOL 120

Menthol - Introduced 120 mm cigarettes - 30 mm CA filter. Tar (20 mg) and nicotine (1.5 mg) deliveries. Dark brown cigarette paper with pin-stripe lines.	6/75
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

LUKE 85

Test marketed - new 85 mm "full flavor" cigarette - Blend contains expanded tobacco (7%). 1/74

Discontinued.

MAVERICK 85

Test marketed - High alkaloid blend (2.0%) and nicotine delivery (1.6 mg) for Lorillard product - 20 mm CA filter. 11/71

Alkaloids decreased - Sugars increased - Tar (2 mg) and nicotine (0.1 mg) reduced - Filler rod TPM reduced (3 mg). 5/72

Test marketed in Washington State - 85 mm - tar (10.3 mg) and nicotine (0.86 mg) - filter ventilation by band of MP holes. 5/81

Discontinued.

MAVERICK 100

Test marketed in Washington State - 100 mm, tar (10.6 mg) and nicotine (0.91 mg) - filter ventilation by band of MP holes. 5/81

Discontinued.

MAX SLIM LIGHTS 100 (BOX)

Introduced - Tar (10 mg) and nicotine (0.9 mg) - Two rows mechanical perforation (32% ventilation) - similar to Virginia Slims Lights 100. 2/82

Discontinued.

MAX SLIM LIGHTS MENTHOL 100 (BOX)

Introduced - Tar (10 mg), nicotine (0.9 mg), and menthol (0.39 mg) - Two rows of mechanical perforation (32% ventilation) similar to Virginia Slims Lights Menthol 100. 2/82

Discontinued.

MAX 120

Plain - Introduced 120 mm cigarette with 30 mm CA filter - White cigarette paper - Tar (16 mg) and nicotine (1.2 mg) deliveries. 7/75

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MAX MENTHOL 120

Menthol - Introduced 120 mm cigarette with 30 mm CA filter - White cigarette paper - Tar (16 mg) and nicotine (1.2 mg) deliveries.	7/75

NEWPORT 80 (BOX)

Filter length (17 to 20 mm) and tipping paper length (22 to 24 mm) increased. Tar (18 to 16 mg) and nicotine (1.2 to 1.1 mg) deliveries decreased.	2/75

NEWPORT 80 (NON-MENTHOL-BOX)

Test marketed in Penn. - 80 mm, non-mentholated, tar (11.8 mg) and nicotine (1.04 mg) - filter ventilation by band of MP holes.	4/81
Discontinued.	

NEWPORT 85

Less porous paper with no effect on TPM or nicotine delivery.	12/61
Alkaloids decreased by 0.2%.	6/63
Increases observed in TPM and nicotine deliveries - Blend change indicated by increases in total alkaloids.	12/63
Nicotine delivery and filler alkaloids increased.	4/65
TPM and nicotine increased - less efficient filter - change in filter fiber denier.	1/66
Alkaloids and nicotine delivery decreased.	7/66
Filter length increased (17 to 20 mm).	1/67
RKS content increased 8 to 12%.	4/67
Tar (1 mg) and nicotine (0.1 mg) lower, no other changes noted.	7/68
Reconstituted material increased, 8 to 13%.	9/68
Package design change.	10/68
Color of tipping paper changed from white to cork.	11/68
Tar (2 mg), nicotine (0.1 mg), and menthol delivery (0.15 mg) decreased, amount of paper component increased, faster static burning time, filler menthol lower.	8/69

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEWPORT 85 (cont.)

Blend change, higher alkaloids and lower sugars - more porous cigarette paper. No change in smoke deliveries.	11/69
Reconstituted tobacco increased 11 to 16% - RKS decreased 9 to 4%.	10/70
Reconstituted tobacco increased 16 to 18% - RKS decreased 6 to 0%.	9/71
Fiber shape changed X to Y.	11/71
Tar delivery (1.5 mg) and filler rod TPM (2 mg) decreased - Alkaloids increased.	5/72
Tar (1 mg) and nicotine (0.2 mg) increased - Changes noted in total alkaloids and paper porosity. Fiber shape and denier change correlating with a more efficient filter.	8/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density and higher total RTD - Also, lower puff count, tar and nicotine deliveries noted.	12/72
Tar (2 mg) and nicotine (0.1 mg) deliveries were higher - Increase in filler rod TPM and filler alkaloids content.	5/76
Filter length (20 to 21 mm) and tipping paper length (24 to 25 mm) increased.	12/76

NEWPORT 85 10'S

Test marketed in Mississippi and Louisiana - 10 cigarettes per pack - sold for one-half the price of a 20 pack, delivers 19 mg tar, 1.4 mg nicotine.	5/91

NEWPORT 85 25's

Test marketed in Pennsylvania - similar to Newport 85 - 200 cigarettes per carton - eight packs per carton.	7/85
Test market expanded - all East Coast.	3/86

NEWPORT 85 (NON-MENTHOL-BOX)

Test marketed in Penn. - 85 mm, non-mentholated, tar (13 mg) and nicotine (1.08 mg) - filter ventilation by band of MP holes.	4/81
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEWPORT 100

Introduced - 100 mm mentholated cigarette with 20 mm CA filter.	6/67
Tar (3 mg) and nicotine (0.2 mg) reduced by increase in tipping paper length (24 to 30 mm).	7/68
Filter length increased 20 to 25 mm, no change in smoke deliveries.	9/68
Tar (3 mg) increased - Filter length (20 to 25 mm) and fiber denier change - Also, tipping paper changed from white to cork.	11/68
Menthol in smoke and filler decreased.	9/69
Blend change, higher alkaloids and lower sugars - more porous cigarette paper - No change in smoke deliveries.	11/69
Reconstituted tobacco increased 11 to 16%.	10/70
RKS decreased 7 to 3%.	9/71
RKS decreased 3 to 0%.	10/71
Tar (2 mg) and nicotine (0.3 mg) were increased by changes in total alkaloids and paper porosity - Fiber shape and denier changed.	8/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, puff count, and higher total RTD - Also, lower tar and nicotine deliveries noted.	12/72
Blend change - Higher alkaloids and increased filler rod TPM delivery resulting in higher tar (1 mg) and nicotine (0.1mg).	7/74
Tipping paper length (30 to 32 mm) increased. Tar (20 to 19 mg) and nicotine (1.4 to 1.3 mg) deliveries decreased.	2/75
Cigarette length (99.2 to 98.3 mm) decreased. Lower tobacco weight noted. No change in smoke deliveries.	4/75
Increase in tar (1 mg) and nicotine (0.1 mg) resulting from a change to a less porous paper-Filter length increased from 25 to 27 mm.	11/75
Tar (2 mg) and nicotine (0.1 mg) deliveries were higher - Increase in filler rod TPM and filler alkaloids content.	5/76
Cigarette length increased (98.2 to 99.3 mm).	12/76
Tipping paper length increased (32 to 34 mm) - no changes were noted in filter length or smoke deliveries.	3/87

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEWPORT 100 10'S

Test marketed in Mississippi and Louisiana - 10 cigarettes per pack - sold for one-half the price of a 20 pack, delivers 21 mg tar and 1.5 mg nicotine. 5/91

NEWPORT 100 25'S

Test marketed in Pennsylvania - similar to Newport 100 - 200 cigarettes per carton - eight packs per carton. 7/85

Test market expanded - all East Coast. 3/86

Tipping paper length increased (32 to 34 mm) - no changes were noted in filter length or smoke deliveries. 3/87

NEWPORT 100 (BOX)

Test marketed in Connecticut - tar 20 mg, nicotine 1.6 mg. 6/84

Discontinued.

NEWPORT LIGHTS 80 (BOX)

Test marketed - Tar (8 mg) and nicotine (0.7 mg) - Low delivery result of 33% filter ventilation with porous tipping paper. Similar to physical characteristics and blend composition of Newport Lights 85. 3/80

NEWPORT LIGHTS 85

Test marketed - low tar (10 mg) and nicotine (0.8 mg). Characterized by a 25 mm CA filter with ventilation (27%) and a high level of paper component in a fast burning cigarette paper. Ventilation system utilizes porous tipping paper. 5/77

Increased tar and CO deliveries resulted from lower ventilation. 1/86

NEWPORT LIGHTS 100

Introduced - nationally - Delivers 9 mg tar, 0.78 mg nicotine, and 0.36 mg of menthol. The low delivery is achieved by using porous tipping paper. 9/81

Increased tar, nicotine and CO deliveries resulted from lower ventilation - higher total RTD resulted. 1/86

Decreased tar, nicotine and CO deliveries resulted from higher ventilation - lower total RTD resulted. 3/86

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NEWPORT LIGHTS 100 (cont.)

Tar (10 to 9 mg), CO (9 to 7 mg) and smoke menthol (0.4 to 0.3 mg) deliveries decreased as a result of increased ventilation (37 to 44%) - A lower total RTD was observed (108 to 101 mm). 9/89

Changed ventilation from porous paper to laser ventilation with four rows of ventilation holes; decreased ventilation (52 to 33%), increased tar delivery, total RTD increased (91 to 127) and filter RTD increased (81 to 100). 1/91

NEWPORT LIGHTS 100 (BOX)

Test marketed in Connecticut - tar 9 mg, nicotine 0.8 mg. 6/84

Discontinued.

NEWPORT SLIM LIGHTS MENTHOL 100 (BOX)

Test marketed - delivers 8 mg tar, 0.7 mg nicotine and 0.6 mg smoke menthol. 3/86

NEWPORT STRIPES 100 (BOX)

Test marketed - New York - delivers 11 mg tar, 0.8 mg nicotine, only nonmentholated Newport on the market. 9/87

NEWPORT STRIPES 100 MENTHOL (BOX)

Test marketed - New York - delivers 11 mg tar, 0.8 mg nicotine and 0.6 mg smoke menthol 9/87

OLD GOLD 80 (BOX)

Introduced in flip-top box - Similar to Old Gold 85. 5/74

Discontinued.

OLD GOLD 100

Introduced - 100 mm cigarette with 25 mm CA filter. 5/69

Coupon added to pack. 6/69

Reconstituted tobacco increased 10 to 16% - RKS decreased 9 to 4%. 10/70

Filter length (25 to 27 mm) increased - Tipping paper length (30 to 32 mm) increased. Tar (21 to 20 mg) and nicotine (1.4 to 1.3 mg) deliveries decreased. 2/75

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

OLD GOLD FILTER 85

Alkaloids reduced by 0.2%, nicotine delivery decreased.	1/63
Nicotine delivery and filler alkaloids increased - TPM increased slightly.	4/65
Filter length (17 to 20 mm) and fiber denier increased - tobacco weight decreased.	5/65
Coupon added to pack.	1/66
TPM (2 mg) and nicotine (0.1 mg) deliveries increased.	7/66
Reconstituted tobacco content increased (9 to 12%).	5/70
Reconstituted tobacco increased 10 to 16% - RKS decreased 8 to 5%.	10/70
Reconstituted tobacco increased 16 to 19% - RKS decreased 6 to 0%.	9/71
Filter fiber shape (I to Y) and denier (3.6 to 3.0) changed - No change in smoke deliveries.	10/71
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, and higher total RTD - Also, lower puff count, tar, and nicotine deliveries were noted.	12/72
Tipping paper length increased 24 to 25 mm.	9/73
Filter length (20 to 21 mm) and tipping paper length (25 to 26 mm) increased.	11/74
Tar (1 mg) and nicotine (0.1 mg) increased as result of increase in filler rod TPM.	12/76
Lower tar (17 to 16 mg) and filler rod TPM deliveries observed resulting from a decrease in tobacco weight.	9/78
Coupon dropped from pack.	11/79
Discontinued shipments for the full margin brand in Kentucky. Test marketed as a branded generic - package changed, total RTD increase (135 to 115 mm of H_2O), smoke deliveries similar to full margin brand.	5/91

OLD GOLD LIGHTS 85

Introduced on test market - Low delivery (9 mg tar and 0.8 mg nicotine) cigarettes characterized by 25 mm CA filter with 34% ventilation. Ventilation achieved using porous tipping paper. Further characterized by a high level of paper component on cigarette paper.	8/77

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

OLD GOLD STRAIGHTS 85 (NF)

Long to king size.	5/60

OLD GOLD LIGHTS 100

Test marketed - delivers 12 mg tar and 0.9 mg nicotine.	5/85

REBEL 85

Introduced - test market - These cigarettes deliver 11.1 mg tar and 0.96 mg nicotine. The ventilation system consists of a band of micro-mechanical perforation. These cigarettes are similar to Maverick 85.	10/81
Discontinued.	4/83

REBEL 100

Introduced - test market - These cigarettes deliver 10.9 mg tar and 0.99 mg nicotine. The ventilation system consists of a band of micro-mechanical perforation. These cigarettes are similar to Maverick 100.	10/81
Discontinued.	4/83

REDFORD 85

Test marketed - new 85 mm "full flavor'' cigarette - Similar to Old Gold 85.	4/73
Discontinued.	

SATIN 100

Test marketed - delivers 11 mg tar and 0.9 mg nicotine - two rows of mechanical perforation.	6/82
Tipping increased (32 to 34 mm).	7/87

SATIN MENTHOL 100

Test marketed - delivers 11 mg tar, 0.9 mg nicotine and 0.39 mg menthol in smoke - two rows of mechanical perforation.	6/82
Tipping increased (32 to 34 mm).	7/87

SATIN 100 - COLORED PACKS

Introduced Satin 100 cigarettes in pink, yellow, and blue packs - cigarettes similar to Satin 100.	11/85

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

SPRING 85

Spring 85 replaced by Spring 100 in March, 1967 (History of Spring 85 in C.I. 1/72).	3/67
Discontinued.	

SPRING 100

Introduced - 100 mm mentholated cigarette with 20 mm CA filter.	3/67
Tar (1 mg) reduced by increasing tipping paper (24 to 27 mm).	11/67
Tar (2 mg) and nicotine (0.2 mg) reduced by increasing tipping paper (27 to 30 mm).	1/68
Filter length increased (20 to 25 mm) - Tar increased (2 mg).	1/69
Reconstituted tobacco increased 6 to 9% - RKS decreased 8 to 5%.	10/70
Reconstituted tobacco increased 11 to 18% - RKS decreased 8 to 0%.	9/71
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, and puff count - Also, lower tar and nicotine deliveries noted.	12/72
Cigarette length (99.2 to 98.4 mm) decreased. Tar (20 to 19 mg) and nicotine (1.1 to 1.0 mg) decreased.	3/75
Tar (1 mg) decreased by a change in tipping paper length (30 to 32 mm).	11/75
Filter length (25 to 27 mm) and fiber denier (6.6 to 7.6 mm) increased - Filler alkaloids increased.	4/76
Cigarette length increased (98.7 to 99.3 mm).	12/76

SPRING LEMON LIGHTS 85

Test marketed in Connecticut - Delivers 9 mg tar and 0.7 mg nicotine - the lemon flavor source is citral.	5/89

SPRING LEMON LIGHTS 85 (MENTHOL)

Test marketed in Connecticut - Delivers 9 mg tar, 0.7 mg nicotine and 0.4 mg smoke menthol - the lemon flavor source is citral.	5/89

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

SPRING LEMON LIGHTS 100

Test marketed in Connecticut - Delivers 11 mg tar and 0.8 mg nicotine - the lemon flavor source is citral. 5/89

SPRING LEMON LIGHTS 100 MENTHOL

Test marketed in Connecticut - Delivers 11 mg tar, 0.8 mg nicotine and 0.5 mg smoke menthol - the lemon flavor source is citral. 5/89

TRIUMPH 85

Test marketed - 85 mm cigarette delivering 4 mg tar and 0.4 mg nicotine. Characterized by high alkaloid blend (2.8%) containing 19% Freon expanded tobacco. 25 mm dual CA filter with 60% ventilation. 11/78

TRIUMPH MENTHOL 85

Test marketed - 85 mm menthol cigarette delivering 4 mg tar and 0.4 mg nicotine. Characterized by high alkaloid blend (2.8%) containing 19% Freon expanded tobacco. 25 mm dual CA filter with 60% ventilation. 11/78

Tar (5 to 4 mg) and nicotine (0.6 to 0.5 mg) data changed on pack to comply with FTC Report. 5/82

TRIUMPH 100

Test marketed in New York - 100 mm, tar (4.7 mg) and nicotine (0.56 mg) - 6 rows of MP ventilation holes. 3/81

TRIUMPH MENTHOL 100

Test marketed in New York - 100 mm, tar (4.9 mg) and nicotine (0.58 mg) - 7 rows of MP ventilation holes. 3/81

TRUE 85

Introduced - king size filter cigarette with dual filter consisting of 10 mm CA and 10 mm polyethylene mouthpiece. 4/66

TPM decreased, 2 mg by increasing filter ventilation. 10/66

Tar decreased (1 mg) - A lower tobacco weight and filler rod TPM noted. 11/68

Reconstituted tobacco increased 10 to 14% - RKS decreased 8 to 3%. 10/70

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TRUE 85 (cont.)

Reconstituted tobacco increased 13 to 17% - RKS decreased 6 to 2%.	9/71
RKS decreased 2 to 0%.	10/71
Fiber shape changed C to Y-shape - No change in deliveries.	11/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, and higher total RTD - Also, lower puff count, tar and nicotine deliveries noted.	12/72
Filter length increased (20 to 25 mm) - Lower tobacco wt. New 5 mg tar version introduced. Lower tar achieved by increased filter ventilation and lower tobacco weight.	10/74
Expanded tobacco level increased (11 to 23%).	7/76
Cigarette length decreased 84.7 to 84.0 mm.	6/78
Tar (5 to 4 mg) data changed on pack to comply with FTC Report.	5/82
Test marketing re-engineered version in New Mexico - uses laser perforation and a lower level of expanded tobacco.	11/83
Re-engineered versions in national distribution - uses laser perforation and lower level of expanded tobacco.	5/84
New package design - silver package with small "True" filter symbol - test marketed in January, 1987 in Minnesota - national in May, 1987.	5/87

TRUE MENTHOL 85

Introduced - Similar to True filter except for presence of menthol.	9/66
Reconstituted tobacco increased 13 to 17% - RKS decreased 6 to 2%.	9/71
RKS decreased 2 to 0%.	10/71
Fiber shape changed C to Y-shape - No change in deliveries.	11/72
Expanded tobacco added to blend (9%) - Resulted in lower tobacco weight, rod density, and higher total RTD - Also, lower puff count, tar and nicotine deliveries noted.	12/72
Filter length increased 20 to 25 mm - Lower tobacco weight. New 5 mg tar version introduced. Cigarettes are similar to True 85.	1/75 7/76

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TRUE MENTHOL 85 (cont.)

Lower tar (6.5 to 5.0 mg) and nicotine (0.5 to 0.4 mg) observed correlating with an increase in filter ventilation. Increased filter ventilation resulted from decreasing the number of rows of ventilation holes (from 9 to 5) in the tipping paper and using a more porous combining plug wrap.	2/77
Cigarette length decreased 84.5 to 84.0 mm.	6/78
Test marketing re-engineered version in New Mexico - uses laser perforation and a lower level of expanded tobacco.	11/83
Re-engineered versions in national distribution - uses laser perforation and lower level of expanded tobacco.	5/84
New package design - silver package with small "True" filter symbol - test marketed in January, 1987 in Minnesota - national in May, 1987.	5/87

TRUE GOLD 85

Introduced nationally in a gold pack - cigarette has cork tipping and delivers 10 mg tar and 0.8 mg nicotine.	11/85

TRUE ULTRA ONE 85

Test marketed - ultra low tar (2 mg) and nicotine (0.2 mg) - 25 mm CA filter with 62% ventilation (6 rows of mechanically perforated).	11/80
Discontinued.	

TRUE 100

Plain - test marketed - 12 mg tar and 0.8 mg nicotine - Blend contains 13% expanded tobacco.	4/74
Cigarette length (99.5 to 97.9 mm) decreased.	6/75
Cigarette length (98.1 to 99.2 mm) increased - Lower tobacco weight and rod density.	6/76
Filter length increased (25 to 27 mm). Tobacco wt. decreased.	7/76

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TRUE 100 (cont.)

Tar (13 to 8 mg) and nicotine (0.9 to 0.7 mg) decreased resulting from an increase in filter ventilation and a lower tobacco weight. A blend change indicated by a higher filler alkaloid content, lower reducing sugars and a higher expanded tobacco level (9 to 18%).	8/79
Test marketing re-engineered version in New Mexico - uses laser perforation and a lower level of expanded tobacco.	11/83
Re-engineered versions in national distribution - uses laser perforation and lower level of expanded tobacco.	5/84
New package design - silver package with small "True" filter symbol - test marketed in January, 1987 in Minnesota - national in May, 1987.	5/87
Tipping increased (32 to 34 mm).	7/87

TRUE MENTHOL 100

Menthol - Test marketed - 12 mg tar and 0.8 mg nicotine - Blend contains 13% expanded tobacco.	4/74
Cigarette length (99.4 to 98.3 mm) decreased.	6/75
Cigarette length (98.3 to 99.1 mm) increased - Lower tobacco weight and rod density.	6/76
Filter length increased (25 to 27 mm). Tobacco weight decreased.	7/76
Tar (13 to 9 mg) and nicotine (0.9 to 0.7 mg) decreased resulting from an increase in filter ventilation and a lower tobacco weight. A blend change indicated by a higher filler alkaloid content, lower reducing sugars and a higher expanded tobacco level (9 to 18%).	8/79
Test marketing re-engineered version in New Mexico - uses laser perforation and a lower level of expanded tobacco.	11/83
Re-engineered version in national distribution - uses laser perforation and lower level of expanded tobacco.	5/84
New package design - silver package with small "True" filter symbol - test marketed in Minnesota.	1/87
Tipping paper length increased (32 to 34 mm) - no changes were noted in filter length or smoke deliveries.	3/87
New package design - national.	5/87

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

TRUE GOLD 100 (SOFT PACK)

Introduced nationally in a gold pack - cigarette has white tipping and delivers 11 mg tar and 0.9 mg nicotine.	11/85

TRUE GOLD 100 BOX

Introduced nationally in a gold box - cigarette has white tipping and delivers 11 mg tar and 0.9 mg nicotine.	11/85

YORK 88

Introduced - dual filter, carbon on tow filter - Filter has gas phase activity.	3/64
Introduced - dual filter, bonded carbon filter - Filter has gas phase activity.	4/64
Discontinued.	12/67

YORK 90 (NF)

Introduced - Imperial Size (N-F, 90 mm).	8/61
Dropped from C.I. (History of Brand in C.I. 5/64).	3/64

YORK 100

Introduced - 100 mm cigarette with 20 mm CA filter.	3/67
Discontinued.	12/67

ZACK 80

Introduced - package looks like blue denim - No unusual characteristics.	10/74
Discontinued.	

ZACK 85

Introduced - package looks like blue denim - No unusual characteristics.	10/74
Discontinued.	

2055656347

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

E. REYNOLDS TOBACCO COMPANY

BRANDON 85 (NF)

Introduced - king size, nonfilter.	2/62
Discontinued.	12/65

BRIGHT 85

Test market - Tar (6 mg), nicotine (0.5 mg) and menthol (0.5 mg) - one row mechanical perforation.	7/82
National distribution.	11/82
Filter length increased (25 to 27 rm) - tobacco weight decreased (0.638 to 0.610 g) - filter RTD increased (4.3 to 4.7 in.).	11/83
More porous cigarette paper (24 to 17 sec.) with increased paper component (0.4 to 0.8%) used on brand - Increased filler menthol (3.1 to 3.4 mg) resulted in higher smoke menthol (0.43 to 0.56 mg).	3/84
Discontinued.	1/87

BRIGHT 100

Test market - Tar (6 mg), nicotine (0.5 mg) and menthol (0.5 mg) - one row mechanical perforation.	7/82
National distribution.	11/82
Increased level of paper component (0.4 to 1.4%) - higher filler menthol (4.1 to 4.5 mg) resulted in higher smoke menthol (0.49 to 0.56 mg).	3/84
Filter length increased (27 to 31 mm) - tobacco weight decreased (0.780 to 0.736 g).	9/84

BROOKWOOD MENTHOL 85

Test marketed - Tar (9 mg) - Cigarette has a high alkaloid blend with filter ventilation consisting of two rows of mechanically perforated holes. Very similar to the Real Menthol 85 already on the market.	8/79
Discontinued.	

2055656348

Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAMEL 70 (NF)

Nicotine delivery and filler alkaloids decreased.	2/62
Nicotine delivery and filler alkaloids increased. Also RTD decreased 0.3 inches of H20.	2/65
Expanded tobacco (7%) noted in blend of some cigarettes.	12/69
Expanded tobacco observed in all cigarettes - Tobacco weight lower - No change in tar or nicotine.	3/70
Filler alkaloids reduced (0.2%) correlating with a lower nicotine delivery.	11/75
Level of reconstituted tobacco increased from 9 to 16%.	9/78
Tar (24 to 19 mg), nicotine (1.7 to 1.4 mg), and CO (15 to 11 mg) deliveries were noted as a result in a change to a more porous cigarette paper and a change in the type paper component (phosphate to citrate).	11/80
CO delivery increased (12.6 to 15.8 mg) correlating with a change to less porous paper (17 to 25 sec.) - paper component increased (0.4 to 1.4%).	3/83
Tobacco weight (0.798 to 0.772 g) and rod density (0.233 to 0.224 g/cc) decreased.	12/89
The level of expanded tobacco decreased (16 to 12%).	9/90

CAMEL FILTER 80 (BOX)

Plain - introduced in flip top box similar to Camel Filter 85 - Tar (19 mg) and nicotine (1.3 mg) deliveries.	10/75
The level of expanded tobacco decreased (16 to 12%).	9/90

CAMEL 83 (BOX)

New brand marketed in North Carolina and New York - delivers 18 mg tar and 1.2 mg nicotine - a 24.6 mm circumference was observed on this brand - the cigarette paper is wood pulp and flax fibers - the filter length and rod length of this product are 2 mm longer than the 80 mm version.	7/90
The level of expanded tobacco decreased (16 to 12%).	9/90

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAMEL FILTER 85

Introduced in three different packages - king size with a 20 mm CA filter.	10/65
Blend change noted in cigarette marketed in brown pack - lower alkaloids resulting in lower nicotine.	4/66
TPM (4 mg) and nicotine (0.2 mg) decreased as result of increase in filter efficiency.	3/67
TPM (2 mg) and nicotine (0.1 mg) decreased as result of change in blend.	4/67
Reconstituted material increased, 19 to 24%.	9/68
Expanded tobacco (9%) noted in blend - no change in tar or nicotine deliveries - Tobacco weight lower.	3/70
The amount of expanded tobacco increased (9 to 12%) - Nicotine delivery decreased (0.1 mg).	3/71
Filter length (20 to 21 mm) and tipping paper (24 to 25 mm) increased. Lower tar (1 mg) and nicotine (0.1 mg) deliveries observed.	10/72
Filler alkaloids reduced (0.1%).	11/75
Tar (15.5 to 13.8 mg), nicotine (1.19 to 1.02 mg) and CO (17 to 14.4 mg) decreased - achieved filter ventilation (0 to 13%) by band of ESP holes.	4/81
Test marketed packs containing 12 cigarettes per pack.	3/83
Tobacco weight (0.752 to 0.718 g) and rod density (0.241 to 0.229 g/cc) decreased.	7/89
The level of expanded tobacco decreased (16 to 12%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp paper.	3/91

CAMEL FILTER 100

National distribution - delivers 18 mg tar and 1.1 mg nicotine.	7/87

CAMEL MENTHOL 85

Introduced - 85 mm mentholated cigarette with 20 mm CA filter.	9/66
TPM (4 mg) and nicotine (0.2 mg) decreased as result of a blend change.	9/67
Discontinued.	

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAMEL LIGHTS 80 (BOX)

Test marketed - Tar (8 mg) and nicotine (0.8 mg) - Similar in characteristics to Camel 85's.	4/80
CO (7.1 to 8.1 mg) increased - change to less porous cigarette paper (16 to 30 sec.) - paper component (0.9 to 1.4%) increased.	8/82
Tobacco weight (0.677 to 0.727 g) and rod density (0.250 to 0.264 g/cc) increased - decreased amount of expanded tobacco (18 to 11%) - decreased total alkaloids observed (1.99 to 1.59%).	9/82
Tar delivery increased (7.8 to 9.1 mg) due to decreased ventilation - Paper component decreased (1.4 to 0.9%). Paper porosity increased (29 to 16 sec.).	5/83
Re-engineered - blend contains two different types of reconstituted material - delivers 10 mg tar and 0.7 mg nicotine.	5/86
Tobacco weight (0.674 to 0.652 g) and rod density (0.227 to 0.217 g/cc) decreased.	12/89
The level of expanded tobacco decreased (16 to 12%).	9/90

CAMEL LIGHTS 83 (BOX)

New brand marketed in Louisville - delivers 11 mg tar and 0.7 mg nicotine - the filter length is 8 mm longer and the rod length is 4 mm shorter than the Camel Lights 80 (Box). A 24.6 mm circumference was observed - the cigarette is wood pulp and flax fibers.	7/90
The level of expanded tobacco decreased (16 to 12%).	9/90

CAMEL LIGHTS 85

Introduced on test market - Low delivery cigarettes (10 mg tar and 0.8 mg nicotine) characterized by a 25 mm CA filter with 32% ventilation and a high alkaloid blend.	9/77
Tar (10 to 8 mg) and nicotine (0.9 to 0.8 mg) decreased from an increase in filter ventilation (25 to 35%).	4/80
Test marketed packs containing 12 cigarettes per pack.	3/83
Filter length increased (25 to 27 mm) - rod density increased (0.233 to 0.245 g/cc).	9/83
Less porous cigarette paper (16 to 24 sec.) with higher level of paper component (0.7 to 1.5%).	11/83

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAMEL LIGHTS 85 (cont.)

A lower level of paper component was observed.	3/88
Tar (9 to 11 mg), nicotine (0.7 to 0.8 mg) and CO (11 to 12 mg) deliveries increased as a result of lower ventilation (24 to 16%). Lower total (134 to 120 mm) and filter (117 to 86 mm) RTD were noted. Tobacco weight (0.689 to 0.642 g) and rod density (0.244 to 0.227 g/cc) decreased.	7/89
The level of expanded tobacco decreased (16 to 12%).	9/90

CAMEL LIGHTS 100

Introduced - 12 mg tar and 1.2 mg nicotine - Very similar to Winston Lights 100's.	4/79
Tar (11.3 to 9.7 mg), nicotine (0.88 to 0.77 mg) and CO (14.5 to 13.6 mg) deliveries decreased - increased ventilation (20 to 26%) - increased filter length (27 to 31 mm) and weight (0.17 to 0.19 g) - decreased tobacco weight (0.851 to 0.808 g) - tipping paper length increased (34 to 35 mm).	5/84
Filter ventilation increased (16 to 33%) - CO decreased (13.8 to 11.4 mg) - ventilation changed from mechanical to electrostatic perforation - lower total RTD (144 to 117 mm of H20) was noted.	3/85
Tobacco weight (0.822 to 0.778 g) and rod density (0.243 to 0.230 g/cc) decreased.	7/89
The level of expanded tobacco decreased (16 to 12%).	9/90
Lowered expanded tobacco (12 to 7%), increased tobacco weight (0.77 to 0.80 g) and density (0.228 to 0.238 g/cc). Ventilation type changed from electrostatic to laser perforation.	5/91

CAMEL TALLS 100

Test marketed - similar to Winston 100 in most characteristics.	9/71
Removed from market.	4/72

CAMEL ULTRA LIGHTS 83 (BOX)

Received from Richmond and Arizona - delivers 6 mg tar and 0.5 mg nicotine.	1/91

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CAMEL ULTRA LIGHTS 84

Received from Richmond and Arizona - delivers 6 mg tar and 0.5 mg nicotine.	1/91
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

CAMEL ULTRA LIGHTS 100 (BOX)

Received from Richmond and Arizona - delivers 6 mg tar and 0.6 mg nicotine.	1/91
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

CENTURY 85

National distribution in 33 states - 25 cigarettes per pack - 14 mg tar and 1 mg nicotine.	7/83
New package graphics.	7/87
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

CENTURY LIGHTS 85

National distribution in 33 states - 25 cigarettes per pack - 9 mg tar and 0.8 mg nicotine.	7/83
New package graphics.	7/87
The tar and CO deliveries decreased as a result of increased ventilation. A shorter tipping paper length (28 to 27 mm) was noted.	5/88
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

CENTURY 100

National distribution in 33 states - 25 cigarettes per pack - 11 mg tar and 1 mg nicotine.	1/84
New package graphics.	7/87
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

CENTURY LIGHTS 100

National distribution in 33 states - 25 cigarettes per pack - 11 mg tar and 1 mg nicotine.	1/84
New package graphics.	7/87
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

CENTURY LIGHTS MENTHOL 100

Test marketed - 25 cigarettes per pack - 12 mg tar, 0.7 mg nicotine and 0.5 mg smoke menthol - 225 cigarettes for the price of 200. 11/85

CHELSEA 100 (BOX)

Test marketed in Florida and Pennsylvania - delivers 10 mg tar and 0.7 mg nicotine - ethylvanillin gives the sidestream smoke a sweet smell. 3/89

CHELSIA 100 MENTHOL (BOX)

Test marketed in Florida and Pennsylvania - delivers 10 mg tar, 0.7 mg nicotine and 0.7 mg smoke menthol - ethylvanillin gives the sidestream smoke a sweet smell. 3/89

DAKOTA 80 (BOX)

Test marketed in Texas and Tennessee - delivers 17 mg tar and 1.1 mg nicotine. These cigarettes are targeted toward young women - the blend is not typical of Reynold's brands - 17% reconstituted tobacco and 10% expanded tobacco. 3/90

DAKOTA LIGHTS 80 (BOX)

Test marketed in Texas and Tennessee - delivers 12 mg tar and 0.9 mg nicotine - targeted toward young women. The blend is not typical of Reynold's products - reconstituted tobacco is 17%, expanded stems are 10%. 3/90

DAKOTA 83 (SLIDE BOX)

Marketed in Arizona - compared to Dakota 80 (Box): increased ventilation (none to 5%), filter length (19.1 to 21.0 mm), decreased permeability (40 to 27), increased tar (17 to 19 mg/cigt.) and nicotine (1.11 to 1.33 mg/cigt.). 1/91

DAKOTA LIGHTS 83 (SLIDE BOX)

Marketed in Arizona - compared to Dakota Lights 80 (Box): filter RTD increased (81 to 95 mm of H_2O), length (18.9 to 26.9 mm), weight (0.13 to 0.17 g), fiber denier (3.0 to 3.4), and tipping paper length increased (27 to 31 mm); tobacco weight decreased (0.721 to 0.673 g). 1/91

DAWN 120

Introduced 120 mm cigarette - white cigarette paper with thin gray parallel lines (filigrain) - Tar (20 mg) and nicotine (1.5 mg) deliveries. 21 mm circumference. 5/75

Discontinued. 12/76

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DAWN MENTHOL 120

Introduced 120 mm menthol cigarette - white cigarette paper with thin gray parallel lines (filigrain) - tar (20 mg) and nicotine (1.5 mg) deliveries. 21 mm circumference.	5/75
Discontinued.	12/76

DORAL 85

Plain (85 mm) model introduced - 25 mm filter, 10 mm CA, and 15 mm plastic sections and utilizes filter ventilation.	11/68
Expanded tobacco (6%) noted in blend since Sept., 1969.	11/69
Reconstituted tobacco in blend increased (20 to 23%) in Doral 85 Plain. Tar delivery increased (1 mg) - filter ventilation decreased (30 to 24%).	4/71
Tar delivery increased (1 mg) - Filter ventilation decreased (24 to 21%).	8/71
Tar delivery decreased by a change to a more porous cigarette paper and a lower filler alkaloid content - Tar (2 mg) and nicotine (0.1 mg) decreased.	9/75
Tar (1 mg) and nicotine (0.1 mg) increased as result of increase in filler rod TPM.	11/76
Discontinued.	

DORAL MENTHOL 85

Mentholated (85 mm) model introduced - 25 mm filter, 10 mm CA, and 15 mm plastic sections and utilizes filter ventilation.	11/68
A green plug wrap was placed between the plastic mouthpiece and outer plug wrap on Doral Menthol.	6/69
Expanded tobacco (6%) noted in blend since September, 1969.	11/69
The amount of expanded tobacco increased (6 to 8%) and the amount of filter ventilation increased. The tar decreased (1 mg).	2/71
Tar delivery increased (1 mg) - Filter ventilation decreased (30 to 24%).	4/71
Tar delivery increased (1 mg) - Filter ventilation decreased (24 to 21%).	8/71

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DORAL MENTHOL 85 (cont.)

Tar delivery decreased by a change to a more porous cigarette paper and a lower filler alkaloid content - Tar (2 mg) and nicotine (0.1 mg) decreased. 9/75

Higher tar (12.3 to 13.7 mg) and nicotine (0.9 to 1.0 mg) were noted corresponding to a decrease in filter ventilation. 3/77

Discontinued.

DORAL II 85

Test marketed - These new Doral II cigarettes deliver 5 mg tar and 0.5 mg nicotine - 25 mm CA filter with 60% ventilation and a high level of paper component in the cigarette paper - 19% Freon expanded tobacco in the blend. 2/79

Discontinued.

DORAL II MENTHOL 85

Test marketed - These new Doral II Menthol cigarettes deliver 5 mg tar and 0.5 mg nicotine - 25 mm CA filter with 60% ventilation and a high level of citrate in the cigarette paper - 19% Freon expanded tobacco in the blend. 2/79

Tar (5.3 to 3.8 mg), nicotine (0.48 to 0.41 mg) and CO (4.2 to 3.2 mg) lowered - increase in filter ventilation (53 to 65%) lower total RTD (3.6 to 2.8). 2/81

Paper component in cigarette paper decreased - higher puff count (7.2 to 7.5). 4/81

Discontinued.

DORAL FILTER LIGHTS 85

Value entry product - test marketed in 13 states - delivers 12 mg tar - contains highest level of reconstituted material (32%). 5/84

National distribution.

New package graphics. 7/87

Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Ventilation was added (28%) which resulted in lower tar and CO deliveries and total RTD. 5/88

The level of expanded tobacco decreased (25 to 21%). 9/90

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DORAL FILTER LIGHTS MENTHOL 85

Value entry product - test marketed in 13 states - delivers 12 mg tar - contains highest level of reconstituted material (32%).	5/84
National distribution.	
New package graphics.	7/87
Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Ventilation was added (32%) which resulted in lower tar and CO deliveries and total RTD.	5/88
The level of expanded tobacco decreased (25 to 19%) resulting in a higher tobacco weight (0.557 to 0.606 g) and rod density (0.203 to 0.213 g/cc).	12/89
The level of expanded tobacco decreased (20 to 16%).	9/90

DORAL FILTER LIGHTS 100

Value entry product - test marketed in 13 states - first 100 mm cigarette introduced using Doral name.	5/84
National distribution.	
New package graphics.	7/87
Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Ventilation increased resulting in lower tar and CO deliveries and total RTD.	5/88
Tar (10 to 11 mg), nicotine (0.8 to 0.9 mg) and CO (9 to 10 mg) deliveries increased as a result of lower ventilation (41 to 34%).	11/89
The level of expanded tobacco decreased (25 to 21%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

DORAL FILTER LIGHTS MENTHOL 100

Value entry product - test marketed in 13 states - first 100 mm cigarette introduced using Doral name.	5/84
National distribution.	
New package graphics.	7/87

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DORAL FILTER LIGHTS MENTHOL 100 (cont.)

Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Ventilation increased resulting in lower tar and CO deliveries and total RTD.	5/88
Ventilation decreased (40 to 32%) - resulted in higher total RTD (91 to 125 mm of H_2O), filter RTD (83 to 118 mm of H_2O) and CO delivery (11 to 13 mg). Lower nicotine delivery (0.8 to 0.7 mg) correlated with lower alkaloids (2.2 to 1.9%).	5/89
The level of expanded tobacco decreased (25 to 19%) resulting in a higher tobacco weight (0.696 to 0.738 g) and rod density (0.204 to 0.218 g/cc).	12/89
The level of expanded tobacco decreased (20 to 16%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

DORAL FULL FLAVOR 80 (BOX)

Test marketed - Louisiana - delivers 14 mg tar and 0.8 mg nicotine.	7/87

DORAL FULL FLAVOR 85

Test marketed in New Hampshire - delivers 17 mg tar and 1 mg nicotine - uses phosphate as paper component.	1/87
National distribution.	3/87
Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Ventilation (7%) was added.	5/88
The level of expanded tobacco decreased (25 to 21%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

DORAL FULL FLAVOR 100

Test marketed in New Hampshire - delivers 14 mg tar and 0.9 mg nicotine.	1/87
Nationally distributed.	3/87
Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery.	5/88
Tipping paper length decreased (36 to 35 mm).	5/89

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DORAL FULL FLAVOR 100 (cont.)

The level of expanded tobacco decreased (25 to 21%).	9/90
Blend was changed from 25 to 21% expanded tobacco; tobacco weight increased (0.70 to 0.72 g), tar increased (14 to 16 mg/cigt.) and nicotine (1.0 to 1.2 mg/cigt.).	1/91
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

DORAL FULL FLAVOR MENTHOL 85

Distributed nationally - delivers 16 mg tar, 1.1 mg nicotine and 0.5 mg smoke menthol.	3/89
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91
Lowered expanded tobacco (21 to 16%), increased tobacco weight (0.67 to 0.74 g), density (0.215 to 0.239 g/cc), puffs/cigt. (8.2 to 9.3).	5/91

DORAL FULL FLAVOR MENTHOL 100

Distributed nationally - delivers 15 mg tar, 1.1 mg nicotine and 0.6 mg smoke menthol.	3/89
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91
Lowered expanded tobacco (21 to 16%), increased tobacco weight (0.71 to 0.81 g), rod density (0.211 to 0.241 g/cc), puff count (8.6 to 9.6 puffs/cigt.) and ventilation (none to 7%).	5/91

DORAL ULTRA LIGHTS 85

Introduced nationally - this value entry product delivers 5 mg tar and 0.4 mg nicotine.	5/89
The level of expanded tobacco decreased (25 to 21%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

DORAL ULTRA LIGHTS 100

Distributed nationally - delivers 7 mg tar and 0.4 mg nicotine - uses phosphate as the paper component.	3/87
Levels of reconstituted tobacco (39 to 22%) and expanded tobacco (32 to 25%) decreased resulting in higher alkaloid content and nicotine delivery. Increased ventilation resulted in lower tar and CO deliveries and lower total RTD.	5/88

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

DORAL ULTRA LIGHTS 100 (cont.)

The level of expanded tobacco decreased (25 to 21%).	9/90
Changed from 50/50 wood plup/flax to 95-100% wood pulp.	1/91

EMBRA 100

100 mm slim cigarettes with 27 mm filter, plain - new type pack and carton.	9/69
Expanded tobacco (6%) noted in blend since August, 1969.	11/69
Tar (4 mg) and nicotine (0.2 mg) increased by changes in paper porosity (11 to 18 sec.) and fiber denier.	2/70
Discontinued by Reynolds in May, 1970.	5/70

EMBRA MENTHOL 100

100 mm slim cigarettes with 27 mm filter, mentholated - new type pack and carton.	9/69
Expanded tobacco (6%) noted in blend since August, 1969.	11/69
Tar (4 mg) and nicotine (0.2 mg) increased by changes in paper porosity (11 to 18 sec.) and fiber denier.	2/70
Discontinued by Reynolds in May, 1970.	5/70

HORIZON 84

Test marketed in St. Louis, Missouri and Dallas, Texas - delivers 12 mg tar and 0.9 mg nicotine. Contains ethyl vanillin as an aroma release compound. Pack has coupon which advertises "the first cigarette that smells good."	3/91

HORIZON MENTHOL 84

Test marketed in St. Louis, Missouri and Dallas, Texas - delivers 12 mg tar, 0.9 mg nicotine and 0.5 mg smoke menthol. Contains ethyl vanillin as an aroma release compound. Pack has coupon which advertises "the first cigarette that smells good."	3/91

HORIZON 100

Test marketed in Georgia - delivers 12 mg tar and 0.8 mg nicotine. This product uses ethyl vanillin as the sidestream aroma compound.	5/90

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

HORIZON 100 (MENTHOL)

Test marketed in Georgia - delivers 12 mg tar, 0.8 mg nicotine and 0.7 mg menthol. This product uses ethyl vanillin as the sidestream aroma compound. 5/90

JAMESTOWN 85

85 mm cigarette - similar to Winston 85 possibly for trademark purposes. 6/70

Discontinued.

MAGNA 80 (BOX)

Distributed in ten cities - generic price - delivers 12 mg tar and 0.8 mg nicotine. 3/87

The level of expanded tobacco decreased (25 to 12%). 9/90

Changed from 50/50 wood pulp/flax to 95-100% wood pulp. 1/91

MAGNA LIGHTS 80 (BOX)

Introduced nationally - this value entry product delivers 9 mg tar and 0.6 mg nicotine. 5/89

The level of expanded tobacco decreased (25 to 12%). 9/90

Changed from 50/50 wood pulp/flax to 95-100% wood pulp. 1/91

MAGNA 83 (BOX)

New brand being marketed in Virginia, Washington, DC, North Carolina and Georgia. This product delivers 18 mg tar and 1.2 mg nicotine - the filter length and rod length are 2 mm longer than the 80 mm product - the circumference of this product is 24.6 mm. The cigarette paper is wood pulp and flax fibers. 7/90

MAGNA LITES 83 (BOX)

New brand being marketed in Louisville - delivers 12 mg tar and 0.9 mg nicotine - the filter length is 8 mm longer and the rod length is 4 mm shorter than the 80 (Box) product. The circumference of this product is 24.6 mm - the cigarette paper is wood pulp and flax fibers. 7/90

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MAGNA 85

Distributed in ten cities - generic price - delivers 12 mg tar and 0.8 mg nicotine.	3/87
The level of expanded tobacco decreased (25 to 12%) resulting in an increase in tobacco weight (0.620 to 0.727 g) and rod density (0.199 to 0.234 g/cc).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

MAGNA LITES 85

Distributed in ten cities - generic price - delivers 9 mg tar and 0.6 mg nicotine.	3/87
Lower ventilation (22 to 17%) and a change in cigarette paper resulted in higher tar (10 to 11 mg) and nicotine (0.7 to 0.8 mg) deliveries. The cigarette paper is more porous and has a lower level of paper component. A lower total and filter RTD were noted.	11/89
The level of expanded tobacco decreased (16 to 12%).	9/90
Changed from 50/50 wood pulp/flax to 95-100% wood pulp.	1/91

MORE 120 (BOX)

Plain - Introduced - 120 mm cigarette with brown colored cigarette and tipping paper. This new cigarette is slimmer (21 mm circumference) and longer (119 mm) than any other cigarette on the market. Two versions introduced - 1 with 3 rows of parallel (mechanically) ventilation holes the length of the cigarette rod and 1 without ventilation holes.	9/74
Tar decrease (22 to 21 mg) by increase in filter ventilation (22 to 36%). A lower total RTD was observed.	9/79
Tar (20.5 to 18.5 mg), nicotine (1.64 to 1.52 mg) and CO (23.2 to 20.4 mg) reduced - lower filler rod TPM (38.1 to 35.1 mg).	1/81
Tar (17.3 to 15.8 mg), nicotine (1.46 to 1.23 mg) and CO (20.4 to 19.3 mg) lowered - increase in filter length (30 to 35 mm) and tipping paper length (35 to 39 mm).	5/81
Tar (15 to 17.1 mg), nicotine (1.19 to 1.36 mg) and CO (21 to 22.8 mg) increased - decreased ventilation (37 to 28%).	11/82
Tobacco weight (0.771 to 0.735 g) and rod density (0.255 to 0.245 g/cc) decreased.	7/89

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MORE 120 (BOX) (cont.)

The level of expanded tobacco decreased (16 to 12%).	9/90
Reduced expanded tobacco (16 to 12%). Filter ventilation changed from mechanical to Hauni laser.	1/91

MORE MENTHOL 120 (BOX)

Menthol - Introduced - 120 mm cigarette with brown colored cigarette and tipping paper. This new cigarette is slimmer (21 mm circumference) and longer (119 mm) than any other cigarette on the market. Two versions introduced - one with 3 rows of parallel (mechanically) ventilation holes the length of the cigarette rod and one without ventilation holes.	9/74
Tar decrease (23 to 22 mg) by increase in filter ventilation (23 to 33%). A lower total RTD was observed.	9/79
Tar (21.2 to 18.8 mg), nicotine (1.75 to 1.53 mg) and CO (23.4 to 19.4 mg) reduced - lower filler rod TPM (38.1 to 35.1 mg).	1/81
Tar (18 to 16 mg), nicotine (1.5 to 1.3 mg) and CO (20 to 19 mg) lowered - increase filter length (30 to 35 mm) and tipping paper length (35 to 39 mm).	6/81
Tobacco weight (0.780 to 0.721 g) and rod density (0.259 to 0.239 g/cc) decreased.	7/89
The level of expanded tobacco decreased (16 to 12%).	9/90
Reduced expanded tobacco (16 to 12%). Filter ventilation changed from mechanical to Hauni laser.	1/91

MORE LIGHTS 100 (BOX)

Introduced - a beige colored slim cigarette - targeted for the female market - tar (8 mg) and nicotine (0.6 mg) - expanded tobacco (16%).	6/81
Color of cigarette paper changed to deep tan - design of package changed.	9/84
Tobacco weight (0.678 to 0.639 g) and rod density (0.246 to 0.232 g/cc) decreased.	7/89

MORE LIGHTS MENTHOL 100 (BOX)

Introduced - a beige colored slim cigarette - targeted for the female market - tar (8 mg) and nicotine (0.6 mg) - expanded tobacco (28%).	6/81

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

MORE LIGHTS MENTHOL 100 (BOX) (cont.)

Filler menthol increased (2.6 to 3.4 mg) - smoke menthol increased (0.39 to 0.56 mm) - ventilation system changed from mechanical to Hauni laser perforation. 5/84

Color of cigarette paper changed to deep tan - design of package changed. Decrease in expanded tobacco (28 to 17%) - increase in tobacco weight (0.603 to 0.684 g) - increase puff count (8.0 to 9.5). 9/84

Tobacco weight (0.678 to 0.638 g) and rod density (0.247 to 0.232 g/cc) decreased. 12/89

MORE LIGHTS 120

Test marketed - San Francisco and Los Angeles - delivers 12 mg tar and 0.9 mg nicotine - similar to More 120's. 7/87

MORE LIGHTS 120 MENTHOL

Test marketed - San Francisco and Los Angeles - delivers 12 mg tar, 0.9 mg nicotine and 0.5 mg smoke menthol - similar to More 120's. 7/87

MORE WHITE LIGHTS 120

Test marketed on East Coast - delivers 9 mg tar and 0.7 mg nicotine - uses white cigarette paper. 1/89

MORE WHITE LIGHTS MENTHOL 120

Test marketed on East Coast - delivers 11 mg tar, 0.7 mg nicotine and 0.5 mg smoke menthol - uses white cigarette paper. 1/89

MR. MENTHOL 85

85 mm mentholated cigarette with 20 mm CA filter. Single row of ventilation holes - Blend does not contain expanded tobacco. 2/70

Discontinued.

NOW 80 (BOX)

Introduced a low tar (0.2 mg) and nicotine (0.03 mg) cigarette. Ultra low delivery achieved by high filter ventilation (85%) and low tobacco weight (82% expanded tobacco). 4/80

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NOW 85 (BOX)

Plain - test marketed in a flip-top box - Tar (2 mg) and nicotine (0.2 mg) deliveries - Accomplished primarily by high ventilation and blend composition - Blend contains 50% expanded tobacco and lowest filler weight of any 85 mm cigarette.	12/75
Test marketed in a crush-proof box - Tar (2 mg) and nicotine (0.2 mg) deliveries accomplished by high filter ventilation and blend composition - Blend contains 50% expanded tobacco and has a rod density of 0.170 g/cc.	1/76
Tar and nicotine data on pack changed to 1 mg and 0.1 mg, respectively. Lower tar achieved as result of increased filter ventilation.	12/76
Tar (1 mg) and nicotine (0.1 mg) data listed on pack replaced by statement "Ultra Low Tar." Increase in filler alkaloids noted.	11/77
Tar (2 to 0.6 mg), nicotine (0.2 to 0.06 mg) and CO (2 to <1.0 mg) lowered - increase filter ventilation (68 to 82%) and tipping paper (30 to 35 mm) - tar data on pack changed from 2 to 1 mg.	6/81
Filter length increased (25 to 27 mm) - filter RTD increased (6.1 to 6.5 in. H20) - tobacco weight (0.524 to 0.505 g) and rod density (0.182 to 0.718 decreased Ventilation system changed from mechanical to laser perforation.	9/83
Tipping paper length decreased (35 to 31 mm).	1/84
Discontinued - replaced by Now 85 (SP).	11/77

NOW 85 (SOFT PACK)

Soft pack version marketed in Washington, D.C. Similar to hard box version of Now 85 cigarettes with the exception of a longer cigarette length. "Ultra Low Tar" specified on the package.	11/77
Tobacco weight (0.514 to 0.471 g) and rod density (0.181 to 0.167 g/cc) decreased.	7/89
Package changed from silver to brushed gold color.	1/91

NOW MENTHOL 85 (BOX)

Menthol - test marketed in a flip top box - Tar (2 mg) and nicotine (0.2 mg) deliveries - Accomplished primarily by high ventilation and blend composition - Blend contains 50% expanded tobacco and lowest filler weight of any 85 mm cigt.	12/75

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NOW MENTHOL 85 (BOX) (cont.)

Menthol - Test marketed in a crush-proof box - Tar (2 mg) and nicotine (0.2 mg) deliveries accomplished by a high filter ventilation and blend composition - Blend contains 50% expanded tobacco and has a rod density of 0.17 g/cc.	1/76
Tar and nicotine data on pack changed to 1 mg and 0.1 mg, respectively. Lower tar achieved as result of increased filter ventilation.	12/76
Tar (1 mg) and nicotine (0.1 mg) data listed on pack changed to 2 mg and 0.2 mg, respectively. Increase in filler alkaloids noted.	11/77
Tar (2 to 0.06 mg), nicotine (0.2 to 0.06 mg) and CO (2 to <1.0 mg) lowered - increase filter ventilation (68 to 82%) and tipping paper (30 to 35 mm) - tar data on pack changed from 2 to 1 mg.	6/81
Filter length increased (25 to 27 mm) - decreased tobacco weight (0.517 to 0.492 g). Ventilation system changed from mechanical perforation to laser perforation.	11/83
Tipping paper length decreased (35 to 31 mm).	1/84
Discontinued - replaced by Now Menthol 85 (SP).	11/77

NOW MENTHOL 85 (SOFT PACK)

Soft pack version marketed in Washington, D.C. Similar to hard box version of Now Menthol 85 cigarettes with the exception of a longer cigarette length. "Ultra Low Tar" specified on the package.	11/77
Tobacco weight (0.487 to 0.468 g) and rod density (0.173 to 0.165 g/cc) decreased.	12/89

NOW 100

Test marketed - Tar (2 mg) and nicotine (0.2 mg) - Low delivery achieved by 75% filter ventilation.	3/80
Expanded tobacco (25 to 50%) increased - reconstituted tobacco (22 to 15%) decreased - lower tobacco weight (0.805 to 0.664 g) and rod density (0.229 to 0.185 g/cc).	2/81
Ventilation system changed from three to two rows laser perforation.	5/83

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Source: https://www.industrydocuments.ucsf.edu/docs/tngl0000

NOW 100 (cont.)

Lower puff count due to less porous paper (14 to 23 sec.) with high level of paper component (0.5 to 1.6%). Increased filter RTD (3.7 to 4.7 in. H20) and filter efficiency (58 to 65%) due to change in fiber denier (3.5/Y to 2.6/Y).	11/83
Tar (2.8 to 3.6 mg), nicotine (0.28 to 0.34 mg) and CO (2.9 to 4.3 mg) increased - decrease in ventilation (74 to 66%) - filter length (27 to 31 mm), filter weight (0.18 to 0.20 g), increased - tobacco weight decreased (0.659 to 0.614 g).	5/84
Tar, nicotine and CO decreased as a result of higher ventilation.	11/87
Tobacco weight (0.621 to 0.576 g) and rod density (0.185 to 0.170 g/cc) decreased.	7/89
Package changed from silver to brushed gold color.	1/91

NOW 100 (BOX)

Introduced - slim cigarette (22.5 mm), tar (0.00 mg), filter ventilation (95%), and filter RTD (9.5) - blend 100% expanded tobacco.	3/81

NOW MENTHOL 100

Test marketed - Tar (2 mg) and nicotine (0.2 mg) - Low delivery achieved by 75% filter ventilation.	3/80
Expanded tobacco (25 to 50%) increased - reconstituted tobacco (22 to 15%) decreased - lower tobacco weight (0.796 to 0.656 g) and rod density (0.229 to 0.185 g/cc).	2/81
Tar (2.8 to 1.4 mg) and nicotine (0.25 to 0.20 mg) decreased - ventilation (76 to 82%) increased - menthol (0.34 to 0.29 mg) decreased.	5/82
Tar (1.5 to 2.3 mg), nicotine (0.21 to 0.30 mg) and CO (0.9 to 1.8 mg) increased - decreased ventilation (82 to 76%).	9/82
Ventilation system changed from three to two rows laser perforation.	5/83
CO increased (1.6 to 2.5 mg) due to a change to a less porous paper (15 to 25 sec.) with higher level of paper component (0.4 to 1.9%) - Fiber denier decreased (3.2/Y to 2.4/Y) resulting in increased filter RTD (3.8 to 4.6 in. H20) and filter efficiency (54 to 64%).	1/84

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